BEFORE THE PUBLIC UTILITIES COMMISSION

OF THE STATE OF HAWAII

------------In the Matter of the Application of-----------	)	
	)	
HAWAIIAN ELECTRIC COMPANY, INC.	)	Docket No. 2006-0386
	)	
For Approval of Rate Increases and Revised Rate Schedules and Rules	))	
	)	

JOINT PROPOSED FINDINGS OF FACT AND CONCLUSIONS OF LAW

EXHIBITS 1 and 2

and

CERTIFICATE OF SERVICE

FILED

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PUBLIC UTILITIES
COMMISSION

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JOINT PROPOSED FINDINGS OF FACT AND CONCLUSIONS OF LAW

In accordance with the Commission's October 24, 2007 letter, Hawaiian Electric Company, Inc. ("HECO" or "Company") and the Division of Consumer Advocacy of the Department of Commerce and Consumer Affairs ("Consumer Advocate") hereby submit their Joint Proposed Findings of Fact and Conclusions of Law. As the Parties have settled all issues in this proceeding, HECO and the Consumer Advocate have agreed to jointly file their Proposed Findings of Fact and Conclusions of Law. The DOD filed its Proposed Findings of Fact and Conclusions of Law on October 26, 2007.

Also enclosed are 1) Exhibit 1 which is identical to Exhibit 1 of the September 6, 2007 Stipulated Settlement Letter except that it also includes calculations and citations (shown in red) supporting the information in that letter and 2) supplemental information to Exhibit 1. They further support the revenue requirements to which the Parties have stipulated, and do not change any of the agreements between HECO, the Consumer Advocate, and the DOD in the

September 6, 2007 Stipulated Settlement Letter. The supplemental information to Exhibit 1 includes the following:

1. Supplemental Information HECO T-3, Attachment 1
2. Supplemental Information HECO T-10, Attachment 3
3. Supplemental Information HECO T-13, Attachment 3
4. Supplemental Information HECO T-13, Attachment 4

Exhibit 1 to this document and the supplemental information are similar to the annotated Exhibit 1 to the Stipulated Settlement Letter for the Hawaii Electric Light Company, Inc. ("HELCO") 2006 test year rate case (Docket No. 05-0315) and certain supplemental information that HELCO and the Consumer Advocate jointly filed on April 30, 2008 to support the proposed revenue requirements for that proceeding.

Following is a table of contents which provides the section names and page numbers in the Joint Proposed Findings of Fact and Conclusions of Law.

DATED: Honolulu, Hawaii, December 30, 2008.

Thomas W. Williams, Jr.	
Thomas W. Williams, Esq. Peter Y. Kikuta, Esq. Damon L. Schmidt, Esq. Attorneys for Hawaiian Electric Company, Inc.	Jon S. Itomura, Esq. Lane H. Tsuchiyama, Esq. Attorneys for Division of Consumer Advocacy Department of Commerce and Consumer Affairs

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JOINT PROPOSED FINDINGS OF FACT AND CONCLUSIONS OF LAW

Hawaiian Electric Company, Inc. ("HECO" or the "Company") and the Division of Consumer Advocacy, Department of Commerce and Consumer Affairs ("Consumer Advocate") respectfully submit these Joint Proposed Findings of Fact and Conclusions of Law. The other party in this proceeding is the Department of the Navy on behalf of the Department of Defense ("DOD").[1] The DOD filed its Proposed Findings of Fact and Conclusions of Law on October 26, 2007.

I.

Introduction

A.

Summary

1. As discussed below, there were only two issues remaining between the Parties impacting revenue requirements following their settlement agreement filed September 6, 2007.

[1] HECO, the Consumer Advocate and the DOD are collectively referred to herein as the "Parties."

See Part I.E., infra. The interest synchronization issue was resolved by the Commission's decision in Docket No. 04-0113, HECO's 2005 test year rate case. See Part II.A.2., infra. In light of the Commission's decision with respect to the pension asset issue in Docket No. 04-0113, the Company has determined that it will not further pursue that issue in this rate case. See Part II.A.1., infra. Therefore, there are no further issues between the Parties impacting revenue requirements to be resolved.

2. With respect to rate design, the Parties resolved all issues. Although not an issue between the parties, legislation required the Commission to consider whether there should be a sharing of the risk associated with changes in the price of oil that is reflected in the existing Energy Cost Adjustment Clause ("ECAC"). Given the Energy Agreement between HECO and the Consumer Advocate,[2] which documents a course of action to make Hawaii energy independent, and recognizes the need to maintain HECO's financial health while achieving that objective, as well as the overwhelming support in the record for maintaining the ECAC in its current form, the Commission should determine that HECO's proposed ECAC complies with the requirements of Hawaii Revised Statutes ("HRS") § 269-16(g). See Part II.A.3., infra.

3. Thus, HECO respectfully requests that the Commission approve a final general rate increase of $77,466,000 (based on August 2006 fuel oil and purchased energy prices) over the base rates established by the Commission in Docket No. 04-0113 and a revenue requirement of $1,480,538,000 for the 2007 test year. See Part I.I., infra.

[2] *Energy Agreement among the State of Hawaii, Division of Consumer Advocacy of the Department of Commerce and Consumer Affairs, and Hawaiian Electric Companies*, dated October 20, 2008 (the "Energy Agreement"). The signatories include the Governor of the State of Hawaii, the Department of Business, Economic Development and Tourism, the Consumer Advocate, HECO, Hawaii Electric Light Company, Inc. ("HELCO") and Maui Electric Company, Limited ("MECO").

B.

Procedural Background

4. On December 22, 2006, HECO filed an application for approval of rate increases and revised rate schedules and rules in which HECO requested a general rate increase of approximately $99,556,000, or 7.1%, over revenues at current effective rates (i.e., revenues that were in effect at the time HECO filed its application, including revenues from the interim rate increase approved by the Commission in Interim Decision and Order No. 22050 ("Interim D&O 22050") in HECO's 2005 test year rate case, Docket No. 04-0113). HECO's filing included its Direct Testimonies, Exhibits and Workpapers.[3] HECO filed its Application pursuant to Hawaii Administrative Rules ("HAR") Title 6, Chapter 61, Subchapters 2, 6, and 8, Rules of Practice and Procedure before the Public Utilities Commission. HECO seeks Commission approval of the proposed rate increase and revised rate schedules pursuant to Hawaii Revised Statutes ("HRS") § 269-16.

5. HECO served copies of the Application on the Consumer Advocate, an *ex officio* party to this docket, pursuant to HRS § 269-51 and HAR § 6-61-62.

6. By Order No. 23262, filed on February 15, 2007, the Commission found that the application was complete and properly filed under HRS § 269-16(d) and HAR § 6-61-87. Thus, the filing date of HECO's completed Application is December 22, 2006.

[3] HECO's Application and Certificate of Service, filed on December 22, 2006 ("Application"). On September 22, 2006, HECO filed a Notice of Intent, pursuant to Hawaii Administrative Rules ("HAR") § 6-61-85, stating that it planned to request rate relief based on a 2007 calendar year test period and file an application on or after November 22, 2006.

7. On March 6, 2007, the Commission held a public hearing on the Application at the Prince David Kawananakoa Middle School Cafeteria in Honolulu, Hawaii, to gather public comments on this docket.

8. On April 5, 2007, HECO and the Consumer Advocate filed a Stipulated Procedural Schedule in this docket, pursuant to Order No. 23262, filed on February 15, 2007.

9. By Order No. 23366, filed on April 13, 2007, the Commission granted the Motion to Intervene and Become a Party filed by the DOD on February 20, 2007, and denied the Motion to Intervene filed by Life of the Land on January 5, 2007.

10. Given the DOD's intervention in this docket, by letter dated April 23, 2007, the Commission instructed HECO, the Consumer Advocate, and DOD to re-submit a Stipulated Procedural Schedule that incorporates DOD into the procedural schedule of this proceeding. On May 4, 2007, the Parties filed a Revised Stipulated Procedural Schedule, which the Commission approved by Order No. 23442, filed on May 17, 2007.

11. On April 23, 2007, the Commission also issued Protective Order No. 23378 to govern the classification, acquisition and use of confidential information by any party in this docket.[4]

12. During the period from February through July 2007, HECO responded to information requests ("IRs") submitted by the Consumer Advocate and the DOD. In June and July 2007, HECO also submitted updates to the 2007 test year estimates reflected in the Application, Direct Testimonies, Exhibits and Workpapers filed on December 22, 2006, including incorporation of certain recorded 2006 results as well as other corrections and revisions.

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[4] On June 4, 2007, the Commission issued Amended Protective Order No. 23378, which revised the protective order to include the DOD.

13. The Consumer Advocate's and DOD's Testimonies, Exhibits and Workpapers were filed on August 6, 2007, and proposed rate increases of $53,550,000, and $54,959,000, respectively. HECO submitted a number of IRs to the other Parties on August 16, 2007, as modified with respect to the IRs to DOD on August 22, 2007. As stated in the Consumer Advocate's letter dated August 24, 2007, HECO informed the Parties that responses would only be required (for purposes of HECO's rebuttal) if the issues were not resolved in the on-going settlement discussions. The Consumer Advocate and DOD opted to file responses to certain HECO information requests regarding the pension asset issue on September 10, 2007 and September 19, 2007, respectively.

14. By Order No. 23612, filed on August 24, 2007, the Commission approved the Stipulated Prehearing Order submitted by the Parties on July 23, 2007, with modifications, and amended the Parties' stipulated procedural schedule, approved in Order No. 23442, filed May 17, 2007.

C.

HECO's Requests

15. HECO's Application requested approval of a general rate increase and revised rate schedules and rules. The amount of the increase in revenues requested was $99,556,000, or 7.1%, over revenues at current effective rates (i.e., rates in effect for customers at the time of the Application, including applicable surcharges). Revenues at current effective rates included revenues from the interim rate increase approved by the Commission in Interim D&O 22050 in HECO's 2005 test year rate case, Docket No. 04-0113. If revenues from the interim rate increase for Docket No. 04-0113 were excluded, the requested relief over the resulting revenues

(i.e., revenues at present rates) would have been $151,505,000, or an 11.2% increase. Application at 1 and 3.

D.

Issues

16. All Parties accepted the 2007 calendar year as the appropriate test year in this rate proceeding based on the requirement of HAR § 6-61-88(3)(B). The issues set forth in Stipulated Prehearing Order No. 23612[5] are as follows:

1. Is HECO's proposed rate increase reasonable?

   a. Are the proposed tariffs, rates, charges, and rules just and reasonable?

   b. Are the revenue forecasts for Test Year 2007 at present rates and proposed rates reasonable?

   c. Are the projected operating expenses for Test Year 2007 reasonable?

   d. Is the projected rate base for Test Year 2007 reasonable, and are the properties included in rate base used or useful for public utility purposes?

   e. Is the requested rate of return fair?

2. What is the amount of the Interim Rate Increase, if any, to which HECO is probably entitled under § 269-16(d) of the Hawaii Revised Statutes?

3. Whether HECO's ECAC complies with the requirements of HRS § 269-16(g)?

E.

Stipulated Settlement Letter

17. Order Nos. 23442 and 23612 govern the proceedings in this docket. Pursuant thereto, the Parties engaged in settlement discussions, in an attempt to resolve the issues

[5] Issues 1 and 2 were set forth in the Parties' proposed Stipulated Prehearing Order filed July 23, 2007. By Order No. 23612, filed August 24, 2007, the Commission amended the Parties' Stipulated Prehearing Order to add Issue 3.

established for this docket. By Stipulated Settlement Letter filed on September 6, 2007 ("Stipulated Settlement Letter"), the Parties documented their agreements on all but two issues impacting revenue requirements: (1) whether the Company's pension asset should be included in the test year rate base, and (2) whether interest synchronization should be used to determine the interest expense deduction for computing the test year income tax expense.[6] The Parties agreed that these issues need not be addressed in an evidentiary hearing and that the Parties may file proposed findings of fact and conclusions of law[7] on the pension asset issue only.[8]

18. In addition, the Stipulated Settlement Letter indicated that with respect to whether HECO's ECAC complies with the requirements of HRS §269-16(g), the Parties had not yet determined how to develop the ECAC design factors identified in the statute and were continuing discussions with respect to the final design of the ECAC. Stipulated Settlement Letter, Exhibit 1 at 3.

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[6] See Section II.A.2 for discussion on the interest synchronization issue.

[7] In Order No. 23612 filed on August 24, 2007, the Commission modified the Parties' proposed Procedural Schedule by requiring the filings of proposed findings of fact and conclusions of law in lieu of opening and reply briefs. As a result, the Stipulated Settlement Letter reflects the modified procedural steps reflected in Order No. 23612.

[8] The Parties also agreed on all but one issue affecting rate design. The Stipulated Settlement Letter indicated that (1) in a subsequent document, the Parties would address the issue of whether there should be a sharing of the risk associated with changes in the price of oil that is reflected in the existing ECAC, (2) the agreement that is reflected in the Stipulated Settlement Letter was intended to provide HECO with timely rate relief through the Commission's authorization of the stipulated interim rate increase, and (3) the Parties' agreement, if any, on the ECAC matter was not expected to impact the agreement on the amount of increase to which HECO is probably entitled. See Stipulated Settlement Letter, at 3-4. By letter dated September 18, 2007, the Commission inquired of the Parties, among other things, whether a subsequent agreement by the Parties, or decision by the Commission, on a different risk-sharing formula for ECAC, would affect the Commission's issuance of interim relief, and the calculation of any refunds that may be required. The Parties responded, in sum, that "[i]f the Parties subsequently agreed to, or the Commission issued an order with, a different risk-sharing formulation under HECO's ECAC, this would not affect the interim rate relief, and would not be the basis for any refund." See Letter filed on September 21, 2007, from the Parties to the Commission, at 2. Section II.A.3 discusses the ECAC issue at length.

19. In the Stipulated Settlement Letter, the Parties agreed that the amount of the interim rate increase to which HECO was probably entitled was $69,997,000 over revenues at current effective rates and $127,293,000 over revenues at present rates. See Interim Decision and Order No. 23749 ("Interim D&O 23749") at 8. Revenues at "current effective rates" for the 2007 test year, based on the stipulated results of operations for the interim, were revenues from the base rates in effect prior to Docket No. 04-0113 (HECO's 2005 test year rate case), plus the interim rate increase approved by the Commission in Interim D&O 22050 in Docket No. 04-0113, and the interim surcharge to recover distributed generation fuel and trucking and low-sulfur fuel oil costs authorized in Order No. 23377 (April 23, 2007) in Docket No. 04-0113. (Interim D&O 23749 at 8 n.10.) Revenues at current effective rates totaled $1,410,457,000. (HECO's Statement of Probable Entitlement, filed September 6, 2007, Exhibit 1, page 1.) The difference between the stipulated interim revenue requirement ($1,480,454,000) and the revenues at current effective rates ($1,410,457,000) equal the interim rate increase of $69,997,000 over revenues at current effective rates. (Id.)

20. Revenues at "present rates" for the 2007 test year were revenues from the base rates in effect prior to Docket No. 04-0113, without including the interim rate increase and interim surcharge revenues. (Interim D&O 23749 at 8 n.11.) Revenues at present rates totaled $1,353,159,000. (HECO's Statement of Probable Entitlement, Exhibit 2, page 1.) The difference between the stipulated interim revenue requirement and the revenues at present rates equal the interim rate increase of $127,293,000 over revenues at present rates. (Id.)

21. As a result of the settlement reached between HELCO and the Consumer Advocate regarding the implementation of a pension tracking mechanism for HELCO in Docket

No. 05-0315 (HELCO's 2006 test year rate case), HECO proposed a pension tracking mechanism in the instant proceeding.[9]

22. For purposes of settlement, the Parties have agreed to a pension tracking mechanism that does not include the amortization of the pension asset as part of the pension tracking mechanism in this proceeding. Not including the amortization has the effect of deferring the issue of whether the pension asset should be amortized for rate making purposes to HECO's next rate case.[10] The pension tracking mechanism will require HECO to create a regulatory asset or regulatory liability, as appropriate, for the difference between the amount of the NPPC included in rates and the actual NPPC recorded by HECO. Stipulated Settlement Letter, Exhibit 1 at 17-18.

23. In this proceeding, HECO also proposed an "Other than Pension Employee Benefits" ("OPEB") (i.e., post-retirement benefits other than pensions) tracking mechanism. HELCO and the Consumer Advocate previously agreed to the implementation of an OPEB tracking mechanism for HELCO in Docket No. 05-0315. For purposes of settlement, the Parties also have agreed to HECO's proposed OPEB tracking mechanism. The Parties stated that

[9] See HECO's June 2007 Update (June 27, 2007), HECO T-10, Attachment 8.

[10] This provision is different from the tracking mechanism that was agreed to for the pending HELCO rate case due to different facts and circumstances. The Parties explain that, in the HELCO rate case, HELCO and the Consumer Advocate were in agreement as to the inclusion of the pension asset in rate base and the amortization of the pension asset balance at the end of the test year. In the current HECO rate case, the Parties disagree as to whether the pension asset should be included in the test year rate base, as well as whether said balance should be amortized for rate making purposes. The issue as to whether such amortization should be recognized in the test year revenue requirements has been deferred to HECO's next rate case. Stipulated Settlement Letter, Exhibit 1 at 17, n.5.

In addition, under the stipulated tracking mechanism, HECO would only be required to fund the minimum level required under the law, until the existing pension asset amount is reduced to zero, at which time HECO would fund the net periodic pension cost ("NPPC") as specified in the pension tracking mechanism for HELCO. If the existing pension asset amount is not reduced to zero by the next rate case, the Parties would address the funding requirements for the pension tracking mechanism in the next rate case. Stipulated Settlement Letter, Exhibit 1 at 17.

implementation of the OPEB tracking mechanism does not impact the test year revenue requirements in this case. Stipulated Settlement Letter, Exhibit 1 at 18.

24. Attached as Exhibit 1 to these Joint Proposed Findings of Fact and Conclusions of Law is supplemental information to the Stipulated Settlement Letter. Exhibit 1 is identical to the Exhibit 1 of the September 6, 2007 Stipulated Settlement Letter except that it also includes calculations and citations (shown in red) supporting the information in the letter. Also appended to Exhibit 1 of this document are additional attachments referred to as Supplemental Information: HECO T-3 Attachment 1, HECO T-10 Attachment 3, HECO T-13 Attachment 3, and HECO T-13 Attachment 4.

F.

Statement of Probable Entitlement

25. Pursuant to the Stipulated Settlement Letter, on September 6, 2007, HECO filed a Statement of Probable Entitlement that reflected the Parties' stipulated agreements. Exhibits 1 and 2, attached to the Statement of Probable Entitlement, set forth the results of the agreement among the Parties on the 2007 test year revenue requirements.

26. The Parties agreed that the amount of the interim rate increase to which HECO is probably entitled under HRS §269-16(d) is $69,997,000 over revenues at current effective rates (and $127,293,000 over revenues at present rates). Statement of Probable Entitlement, Exhibit 3 at 4.

27. The Parties also agreed that the final rates set in Docket No. 04-0113 might impact revenues at the current effective rates and at present rates, and that the amount of the stipulated interim rate increase should be adjusted when the final rates are set to take into account any such changes. On May 1, 2008, the Commission issued D&O 24171 in Docket

No. 04-0113. The calculated revenues at the final rates implemented in Docket No. 04-0113 for the 2007 test year differed from the 2007 test year interim revenue requirement approved in Interim D&O 23749. Parts H and I below on the Motion to Adjust Interim Increase and the Revenue Requirement Correction discuss the adjustment made to the interim rates in the current docket.

G.

Interim Decision and Order No. 23749

28. On October 22, 2007, the Commission issued Interim D&O 23749, approving, on an interim basis, HECO's request to increase its rates to such levels as will produce, in the aggregate, $69,997,000 in additional revenues, or 4.96 per cent over revenues at current effective rates for a normalized 2007 test year. Interim D&O 23749 at 1. Page 1 of Exhibit A of Interim D&O 23749 reflected the associated revenue requirement of $1,480,454,000. As indicated on page 1 of Exhibit B of Interim D&O 23749, no dollars for the pension asset were included in rate base.

29. The Commission also approved, on an interim basis, the adoption of a pension tracking mechanism and an OPEB tracking mechanism, interim rates that incorporate the test year NPPC of $17,711,000, and the test year net periodic benefit costs ("NPBC") of $6,350,000, to be described herein.

30. On October 22, 2007, HECO filed its revised tariff sheets reflecting interim rate increase surcharges, implementing an interim revenue increase of $69,930,600.[11] On October 26, 2007, HECO filed corrected tariff sheets in order to correct the applicable 2007

[11] The amount is equal to the $69,997,000 interim revenue increase less $66,400 of late payment charges. The late payment charges are based on a factor of 0.95% of test year sales. HECO letter from D. Matsuura to Commission, Docket 2006-0386, Re: HECO 2007 Test Year Rate Case – Tariff for Interim Rate Increase, October 22, 2007.

interim rate increase percentages effective October 26, 2007. The corrected percentages resulted in no change to the interim revenue increase of $69,930,600.

31. On October 22, 2007, the Commission issued Proposed Decision and Order No. 23748 for the HECO 2005 test year rate case (Docket No. 04-0113). On October 25, 2007, the Commission issued Amended Proposed Decision and Order No. 23768 ("Amended Proposed D&O") which superseded Proposed Decision and Order No. 23748. The Amended Proposed D&O (page 98) indicated that the prepaid pension asset (net of an adjustment to accumulated deferred income taxes or "ADIT") would not be included in rate base, and that the $750,000 of conservation information advertising expenses would not be included in the test year revenue requirement.

32. On March 4, 2008, the Commission issued Order No. 24068 in Docket No. 04-0113, adopting the interest synchronization method as the mechanism for computing interest expense for the income tax computation in the HECO 2005 test year rate case proceeding. The order required the Parties to file stipulated revised results of operation schedules to reflect amounts consistent with the Commission's decisions in this order and the Amended Proposed D&O, for the Commission's review and approval, and for subsequent incorporation into the Commission's final decision and order in that docket. On March 28, 2008, the Parties filed stipulated revised results of operations for the 2005 test year that excluded the pension asset and associated ADIT from rate base, included an interest expense deduction computed using the interest synchronization method for the purpose of calculating income tax expense for the 2005 test year, and incorporated adjustments for demand-side management ("DSM") expenses and field collection charge revenues to be consistent with the findings specified in the Amended Proposed D&O. Page 1 of Exhibit 1 of the stipulated revised results of

operations reflected a revenue increase of $44,862,000 (revenue requirement of $1,266,459,000) compared to the interim award of $53,288,000 (revenue requirement of $1,274,885,000) approved in Interim D&O 22050.

33. The exclusion of the prepaid pension asset (net of ADIT) from rate base accounted for $7,547,000 of the difference in revenue requirement between Interim D&O 22050 and the revised results of operations. Reduction of DSM expenses from the 2005 test year revenue requirement for recovery through the DSM component of the Integrated Resource Planning Cost Recovery Provision ("DSM Surcharge") and the reduction of field collection charge revenues accounted for another $1,147,000 in reduced revenue requirement. The use of interest synchronization to determine the interest expense deduction for the computation of income taxes increased the 2005 test year revenue requirement by $268,000. Memorandum in Support of Motion to Adjust Interim Increase, filed May 21, 2008, at 9.

34. On May 1, 2008, the Commission issued the final decision and order for the HECO 2005 test year rate case – Decision and Order No. 24171 ("D&O 24171" or "Final D&O"). The Final D&O authorized a revenue requirement of $1,266,459,000.

35. Calculated revenues at the final rates implemented in Docket No. 04-0113 for the 2007 test year total $1,402,671,000. (HECO's Memorandum in Support of Motion to Adjust Interim Increase, Exhibit 1, page 1.) The difference between the stipulated interim revenue requirement ($1,480,454,000) and the revenues at the final rates implemented in Docket No. 04-0113 ($1,402,671,000) equal an adjusted interim rate increase of $77,783,000. The incorporation of interest synchronization adds another $84,000 to the 2007 test year revenue requirement and increases the adjusted interim rate increase to $77,867,000 (Id).

36. Revenues at the final rates implemented in Docket No. 04-0113 for the 2007 test year ($1,402,671,000) are lower than revenues at current effective rates ($1,410,457,000), because the final rate increase of $44,862,000 approved in D&O 24171 filed in Docket No. 04-0113 was lower than the interim rate increase of $53,288,000 approved in Interim D&O 22050 for that proceeding, and certain DSM costs were removed from base rates and are to be recovered through the DSM Surcharge. The final rate increase of $44,862,000 reflects the exclusion of the prepaid pension asset that was included in rate base for purposes of the interim increase in Docket No. 04-0113, offset to some extent by the inclusion of interest synchronization for purposes of computing the test year income tax expense. The remaining difference results from removing the DSM costs from base rates and reducing field collection charge revenues. Memorandum in Support of Motion to Adjust Interim Increase at 10.

H.

Motion to Adjust Interim Increase

37. Interim D&O 23749 recognized that the Parties agreed that the "final rates set in Docket No. 04-0113 may impact revenues at current effective rates and at present rates, and that the amount of the stipulated interim rate increase should be adjusted when the final rates are set to take into account any such changes." (Interim D&O 23749 at 8; see Stipulated Settlement Letter at 3.).

38. In view of the foregoing, HECO filed its Motion to Adjust Interim Increase in the current docket on May 21, 2008. In the Motion, HECO stated that the interim increase for the HECO 2007 test year rate case had to be adjusted from $69,997,000 to $77,867,000 (Memorandum in Support of Motion to Adjust Interim Increase, Exhibit 1, page 1), and should

be made effective on the same day as the effective date of the final rates for the HECO 2005 test year rate case.[12]

39. The Motion to Adjust Interim Increase (page 3) stated that the Consumer Advocate and the DOD have reviewed the calculation of the adjusted interim rate increase and agreed that it has been correctly calculated.

40. On June 20, 2008, the Commission issued its *Order Granting Hawaiian Electric Company, Inc.'s Motion to Adjust Interim Increase Filed on May 21, 2008* ("June 20, 2008 Order"), in which it approved an adjusted 2007 test year interim increase of $77,867,000 over revenues at the final rates authorized in D&O 24171 filed in Docket No. 04-0113, HECO's 2005 test year rate case. In addition, the Commission approved the revised tariff sheets filed by HECO on May 28, 2008, which reflect the adjustments requested in the Motion.

I.

Revenue Requirement Correction

41. Subsequent to the June 20, 2008 Order, the Company discovered that the other operating revenues at current effective rates for the 2007 test year were not calculated in accordance with the charges approved in Decision and Order No. 24171 ("D&O 24171") in Docket No. 04-0113 (HECO's 2005 test year rate case) and were therefore understated. In addition, the other operating revenues at proposed rates did not reflect the Commission's ruling that the Company could not assess the field collection charge to customers when a field call does not result in the successful collection of monies (D&O 24171, page 100) and were therefore overstated.

[12] As will be explained below, the adjusted interim increase also incorporated the interest synchronization method to determine interest expense in the 2007 test year.

42. HECO reran its revenue requirement for the 2007 test year. By letter filed September 30, 2008, HECO filed a correction showing an interim increase of $77,466,000, or $401,000 less than the adjusted interim increase approved in the Commission's June 20, 2008 Order on an annual basis ("Revenue Requirement Correction"). Exhibit 1 to Revenue Requirement Correction.

43. Exhibit 2 of the Revenue Requirement Correction shows the calculation of the lower interim revenue increase of $77,392,400, which will be recovered through the interim revenue increase percentages. (This amount is equal to the $77,466,000 interim revenue increase less $73,600 of late payment charges, based on a factor of .095% of test year sales as specified in item 3 on page 2 of Exhibit 1 of the Settlement Letter). Exhibit 2, page 2 of the Revenue Requirement Correction shows the allocation of the lower interim revenue increase to rate classes. The allocation of revenues to the rate classes, as shown on Exhibit 2, page 2, is based on HECO T-20 Attachment 1 of the Settlement Letter.

44. As shown on Exhibit 2, page 3, the Company over-collected $114,400, including interest, from June 20, 2008 to September 30, 2008 and is refunding this amount. HECO is offsetting the refund against the revised interim revenue increase, as shown in Exhibit 2, page 4, and is applying the refund to ratepayers, effective from October 1 to October 31, 2008. It will apply the revised interim revenue increase without the refund to ratepayers effective November 1, 2008.

45. The reduction of field collection charges in other operating revenues at proposed rates causes electric sales revenues to increase in order to produce a test year operating income that yields a rate of return on average rate base of 8.62%. The increase in electric sales revenues also increases taxes other than income taxes which effectively increases the revenue requirement

at proposed rates by $6,000. In addition, the Company discovered in its review of the 2007 test year numbers, that the domestic production activities deduction ("DPAD") for the 2007 test year required a minor correction as explained in the Company's response to CA-IR-129 in Docket No. 2008-0083 (HECO's 2009 test year rate case). Each of these items would cause an increase to the revenue requirement at proposed rates for the 2007 test year as shown in Exhibit 4. However, the Company decided to forego this impact and did not seek a revision to the 2007 test year revenue requirement at proposed rates of $1,480,538,000 approved in the June 20, 2008 Order. Exhibit 1 to the letter shows that the 2007 test year revenue requirement at proposed rates for the corrected run is identical to the revenue requirement of $1,480,538,000 approved in the June 20, 2008 Order.

46. HECO corrected the 2007 test year interim increase percentages as shown in Exhibit 3, effective October 1, 2008, and acknowledged that all revenues collected for the interim increase are subject to refund upon a final decision and order in this rate case.

47. Exhibit 1 of the September 30, 2008 Revenue Requirement Correction reflects the final revenue requirements for HECO's 2007 test year and should be incorporated in the Commission's final decision and order for this rate case. This exhibit is reproduced as Exhibit 2 hereto.

II.

Discussion

A.

Outstanding Issues

1.

Pension Asset

48. In its direct testimony, HECO proposed to include a pension asset in rate base for rate making purposes. If the Company forecasts a pension liability, the pension liability is treated as a deduction in the rate base calculation. There is an accumulated deferred income tax liability amount or a deferred tax asset amount associated with a prepaid pension asset or pension liability amount, respectively. HECO T-10 at 63-64.

49. The pension asset amounted to $59,405,000 in the test year average rate base. (See June 2007 Update (June 29, 2007), HECO T-17, page 7; and response to DOD-IR-96, page 2, updating HECO-1701). The portion of the ADIT related to the pension asset amounts to $23,114,000 (calculated as the average of the beginning year balance ($26,560,070) shown in HECO's response to CA-IR-136 and the revised year-end balance ($19,668,879) shown in HECO's response to CA-IR-441). The Parties agreed that the exclusion of all or a portion of the pension asset in rate base will also require corresponding adjustment to ADIT. Stipulated Settlement Letter, Exhibit 1 at 20.

50. The Consumer Advocate and the DOD opposed the inclusion of HECO's pension asset in rate base in this proceeding. Whether a pension asset[13] should be included in rate base was also an issue in HECO's 2005, test year rate case (Docket No. 04-0113). In Interim D&O

[13] The pension amount in rate base was referred to as "prepaid pension asset" in Docket No. 04-0113; however, with the adoption of FAS 158, the amount is now referred to as "pension asset."

22050, the Commission found that HECO was probably entitled to include its pension asset in rate base. The Commission noted, however, that its decisions and rulings in the Interim Decision and Order were subject to a more detailed review and analysis, including a review of the Parties' post-hearing briefs on this matter. As a result, the Commission would make a determination on that issue in the final decision and order in Docket No. 04-0113 based on the record in that proceeding.

51. The Parties were unable to reach agreement on this issue in HECO's 2007 test year rate case. In their Stipulated Settlement Letter filed on September 6, 2007, the Parties agreed to address the issue in their respective proposed findings of fact and conclusion of law and responses to proposed findings of fact and conclusions of law, based on the record in this proceeding. In addition, the Parties agreed to incorporate by reference the record on this issue from Docket No. 04-0113. The Parties also agreed that further examination of the issue at an evidentiary hearing was unnecessary, and the Parties waived their rights to a hearing on this issue. For purposes of an interim decision in this proceeding, the Parties agreed to exclude the pension asset and related ADIT from rate base. Stipulated Settlement Letter, Exhibit 1 at 20-21.

52. On October 25, 2007, the Commission issued its Amended Proposed D&O in Docket No. 04-0113 in which it ruled that, based on the specific facts in the record in that proceeding, HECO may not include in its rate base $78,791,000 of its pension asset, net of an adjustment to ADIT reserve of $28,483,000. Amended Proposed D&O, pages 9-16 and 98. However, the Commission specifically stated, "The commission again notes that its decision on this issue is limited to the specific facts of this docket, and recognizes that different facts might warrant a different conclusion." Amended Proposed D&O, page 16.

53. By letter filed with the Commission on November 7, 2007, HECO informed the Commission that it would not file exceptions to the Amended Proposed D&O. HECO stated in the letter that it respectfully disagreed with the findings and conclusion regarding the prepaid pension asset, but recognized that it had the opportunity in the 2005 test year rate case to present evidence and argument on that issue in its filed written testimonies, oral testimony and cross-examination of the other Parties' witnesses at the evidentiary hearing held on September 15, 2005, and in opening and reply briefs for that docket. HECO also stated that, although it would not file exceptions to the Amended Proposed D&O, it might propose to include its pension asset in rate base in future rate cases.

54. On May 1, 2008, the Commission issued D&O 24171 for HECO's 2005 test year rate case which upheld the position set forth in the Amended Proposed D&O on HECO's proposal to include the pension asset, net of an adjustment to ADIT reserve in HECO's test year rate base (pages 15, 100). The Commission stated that its decision on this issue was limited to the specific facts of this docket, and recognized that different facts might warrant a different conclusion (page 17).

55. Given the Commission's decision on the pension asset issue in Docket No. 04-0113, HECO will not pursue its proposal to include its pension asset in rate base in this proceeding (Docket No. 2006-0386) in order to eliminate this outstanding issue and facilitate conclusion of this proceeding. However, given that the Commission's decision was limited to the specific facts of Docket No. 04-0113, the Company retains its right to propose inclusion of a pension asset in rate base in future rate proceedings.

2.

Interest Synchronization

56. The DOD proposed an adjustment for interest synchronization to determine the interest deduction for the calculation of test year income tax expense. DOD T-1 at 39-46. HECO did not agree with this proposal and did not use interest synchronization to develop its revenue requirements for the test year. Although the Consumer Advocate supported DOD's use of interest synchronization for purposes of computing the test year income tax expense, the Consumer Advocate did not make such recommendation in the instant docket in light of the Commission's prior long-standing position on this matter. The Parties took the same positions in Docket No. 04-0113 (HECO 2005 test year rate case). For purposes of settlement, the Parties agreed to not relitigate the issue in this docket, that HECO's method of computing interest expense for the purposes of determining income taxes for the 2007 test year would be used in calculating the interim rate increase (as it was in Interim D&O 22050 in Docket No. 04-0113), and that the interest synchronization methodology issue would be determined by the final non-appealable decision in Docket No. 04-0113. As a result, the Parties agreed to waive evidentiary hearings and proposed findings of fact and conclusions of law with respect to this issue. Stipulated Settlement Letter, Exhibit 1 at 19.

57. The Amended Proposed D&O stated the Commission's intention to reject the DOD's interest synchronization proposal and not require HECO to utilize the interest synchronization method for calculating interest expense (page 22).

58. On November 1, 2007, the DOD filed its Exception to the Commission's decision on interest synchronization in the Amended Proposed D&O. By letters filed with the Commission on November 6 and 7, 2007, the Consumer Advocate and HECO, respectively,

informed the Commission that they would not file exceptions to the Amended Proposed D&O. On March 4, 2008, the Commission issued Order No. 24068 in which it adopted interest synchronization as the mechanism for computing interest expense in the HECO 2005 test year rate case (Docket No. 04-0113) and directed the Parties to file stipulated revised results of operation schedules consistent with this order and the Amended Proposed D&O. Order No. 24068, pages 10 and 11. On March 28, 2008, the Parties filed their stipulated revised results of operations which incorporated the impact of interest synchronization on the 2005 test year revenue requirement.

59. On May 1, 2008, the Commission issued D&O 24171 in HECO's 2005 test year rate case, which confirmed the adoption of interest synchronization for the 2005 test year rate case (page 22) and stated in its findings of fact and conclusions of law that HECO shall be required to utilize the interest synchronization method to calculate its interest expense and that HECO's interest expense of $27,664,000 in the 2005 test year, calculated by this method, is reasonable (page 100).

60. Given the Commission's decision in Docket No. 04-0113 to adopt interest synchronization as the mechanism for determining interest expense when computing income taxes in HECO's 2005 test year rate case, the Parties agreed that interest synchronization should also be used for the purposes of calculating the interim adjustment requested in HECO's Motion to Adjust Interim Increase, filed on May 21, 2008. The revenue requirement impact of incorporating interest synchronization for the adjustment to the 2007 test year interim increase was $84,000 and was included in HECO's proposed adjusted 2007 test year rate case interim increase of $77,867,000 over revenues at the final rates implemented in Docket No. 04-0113. Motion to Adjust Interim Increase at 3; Memorandum in Support of Motion, Exhibit 1 at 1.

HECO also used interest synchronization to derive the 2007 test year interim increase and revenue requirement in its September 30, 2008 Revenue Requirement Correction (Exhibit 1, page 12).

61. Consistent with the stipulation among the Parties, it is HECO's position that, in view of Order No. 24068 filed in Docket No. 04-0113, interest synchronization should be used as the mechanism for computing interest expense for the income tax computation in the final Decision and Order in the current docket.

3.

Energy Cost Adjustment Clause and Act 162

a.

Introduction

62. On June 2, 2006, the Governor of Hawaii signed into law Act 162, which amended HRS §269-16. Act 162, in part, states the following:

> Any automatic fuel rate adjustment clause requested by a public utility in an application filed with the commission shall be designed, as determined in the commission's discretion, to:
>
> (1) Fairly share the risk of fuel cost changes between the public utility and its customers;
>
> (2) Provide the public utility with sufficient incentive to reasonably manage or lower it fuel costs and encourage greater use of renewable energy;
>
> (3) Allow the public utility to mitigate the risk of sudden or frequent fuel cost changes that cannot otherwise reasonably be mitigated through other commercially available means, such as through fuel hedging contracts;
>
> (4) Preserve, to the extent reasonably possible, the public utility's financial integrity; and
>
> (5) Minimize, to the extent reasonably possible, the public utility's need to apply for frequent applications for general rate increases to account for the changes to its fuel costs.

Act 162, §2, 2006 Hawaii Sess. Laws 640, 642-45, codified HRS §269-16(g).

63. By Order No. 23612, filed on August 24, 2007, the Commission determined that "consideration of HECO's energy cost adjustment clause ('ECAC') should also be included as an issue in this docket, in accordance with Act 162, 2006 Session Laws of Hawaii ('Act 162')."

64. The expert testimonies and exhibits presented on behalf of HECO with its application demonstrate that HECO's ECAC complies with the requirements of Act 162. The current level of ECAC fuel price risk sharing is appropriate, and no change is necessary to the current ECAC risk sharing approach.

65. The Company retained a highly qualified consultant, National Economic Research Associates, Inc. ("NERA"), to provide assistance in evaluating the extent to which the HECO, HELCO and MECO ("the Companies") ECACs currently comply with the requirements of Act 162. NERA's final report was received on December 28, 2006 and was submitted to the Commission on December 29, 2006. See HECO T-9 at 65.

66. Jeff D. Makholm, Ph.D., a Senior Vice President at NERA, provided testimony in HECO T-21 explaining the role of fuel adjustment clauses ("FACs") in utility ratemaking in the United States, and addressing the compliance of HECO's current power cost recovery mechanism, the ECAC, with Act 162. Dr. Makholm concluded that (1) FACs are a standard and longstanding part of U.S. utility ratemaking, (2) HECO's ECAC is a well-designed FAC and benefits HECO and its ratepayers, and (3) HECO's ECAC complies with the statutory requirements of Act 162.

67. Eugene T. Meehan, also a Senior Vice President at NERA, provided a summary in HECO T-22 of the type of fuel price hedging that potentially could be performed by HECO in the marketplace and an assessment of the potential impacts of fuel price hedging on HECO, its

customers and the regulatory ratemaking process. His conclusions with respect to fuel price hedging included:

(1) Hedging of oil by HECO would not be expected to reduce fuel and purchased power costs and in fact would be expected to increase the level of such costs,

(2) The liquidity of standard financial hedging products with a term of over a year is limited, and while HECO could partially hedge against oil price risk for periods of just over a year into the future, there would be considerable costs to doing so,

(3) It would not be reasonable for HECO to take the position of a principal and speculate in the oil market with shareholders assuming the risk of oil derivative gains and losses, and

(4) Even if rate smoothing is a desired goal, there may be more effective means of meeting the goal, and there is no compelling reason for HECO to use fuel price hedging as the means to achieving the objective of increased rate stability.

68. Dr. Roger Morin, HECO's expert witness on the cost of common equity, testified that, in the absence of the Commission renewal of the ECAC, HECO's financial condition would deteriorate, its credit ratings would likely be under review for possible downgrade, and its customers would be at risk of having to pay higher rates due to access to capital becoming more expensive for HECO. Dr. Morin recommended as follows:

> I encourage the Commission to renew HECO's ECAC, and I believe that approval of HECO's request for continued approval of its ECAC is fair to HECO, its customers, and investors. I believe that the ECAC deals with the cost of fuel and purchased energy, as well as with the mix of resources, which can vary month-to-month and which can represent a considerable financial outlay, on a consistent basis, without need for recurring regulatory proceedings that are time consuming, costly, and, significantly, create uncertainty within the financial community.

HECO T-18 at 71.

69. Mr. Robbie Alm in HECO T-1, Ms. Tayne Sekimura in HECO T-19 and Mr. Alan Hee in HECO T-9 also addressed, from the Company's perspective, how HECO's current ECAC mechanism complies with the requirements of Act 162.

70. In CA-T-1, the Consumer Advocate agreed that the ECAC should continue to be employed and did not object to the continuation of the ECAC to provide HECO with the opportunity to recover changes in energy costs. CA-T-1 (Michael L. Brosch, a principal and the President of Utilitech, Inc.) at 26. The Consumer Advocate's consultant on fuel expense, Mr. Joseph A. Herz, owner and Vice President of Sawvel & Associates, Inc., examined and supported HECO's proposed changes to its ECAC. CA-T-2 at 45-49. In DOD T-3, the DOD stated that it would be appropriate to use the three efficiency factor approach proposed by HECO and to flow through the actual cost per kWh associated with distributed generation ("DG") energy without application of a fixed efficiency factor. The DOD accepted the Company's test year estimate of ECAC revenues. See Stipulated Settlement Letter, Exhibit 1 at 3.

71. In Docket No. 04-0113 (HECO's 2005 test year rate case), the Consumer Advocate's consultant stated that: "Fuel price volatility in international fuel markets and HECO's dependence upon such markets makes ECAC continuation important to the Company and its ability to timely recover fluctuating costs thereby minimizing earnings volatility and the risk of reduced access to capital markets on reasonable terms." See Docket No. 04-0113, CA-T-1, page 35, CA-T-3, page 60, lines 4-8. (The DOD did not explicitly state a position on the continuation of the ECAC, but based its derivation of ECA Revenues on the Consumer Advocate's estimates, as shown in DOD-126.)

72. The Parties then stipulated that: (1) the ECAC should be continued; (2) a DG component should be added to the ECAC; and (3) the ECA Factor at proposed rates should be reset to zero. Decision and Order No. 24171 (May 1, 2008) ("D&O 24171") at 27-29. The Commission acknowledged that the Parties had utilized significant resources to develop the record in this proceeding, and the record contained information relating to all of the Act 162

factors, except the factor examining HECO's ability to mitigate the risk of sudden or frequent fuel cost changes that cannot otherwise be reasonably mitigated through other commercially available means, such as through fuel hedging. The Commission found that:

> The record is clear that benefits exist for both HECO and its customers, and that eliminating or changing the ECAC at this time is not necessary to encourage renewable resource use. Because the record is well-developed concerning the methodology and necessity for HECO's ECAC, the commission will not require the Parties to file a stipulated procedural schedule on this issue in this docket. Rather, the commission expects that HECO and HELCO will develop information relating to the Act 162 factors for examination during their next rate case proceedings.

D&O 24171 at 29-30.

73. On September 6, 2007, the Parties filed a Stipulated Settlement Letter, which documented agreements reached between the Parties in this 2007 test year rate case. The Stipulated Settlement Letter stated that the Parties had not yet determined how to develop the ECAC design factors identified in HRS §269-16(g) and that the Parties were continuing discussions with respect to the final design of the ECAC to be approved in the final decision and order, and would either submit a further stipulation regarding this matter, or address the matter in their respective proposed findings of fact and conclusions of law. The Parties agreed, however, that their resolution of this issue would not affect their agreement regarding revenue requirements, and that it was appropriate for the Commission to issue its interim rate order based on the stipulated revenue requirements. Stipulated Settlement Letter, Exhibit 1, page 4. Further, the Stipulated Settlement Letter stated (page 3) that in a subsequent document, the Parties would address the issue of whether there should be a sharing of the risk associated with changes in the price of oil that is reflected in the existing ECAC, that the agreement that is reflected in the Stipulated Settlement Letter was intended to provide HECO with timely rate relief through the Commission's authorization of the stipulated interim rate increase, and that the Parties'

agreement, if any, on the Act 162 matter is not expected to impact the agreement on the increase to which HECO was probably entitled as set forth in this letter agreement.

74. For purposes of the interim rate increase, the Parties agreed that the ECAC should continue in its present form. Furthermore, as a result of the settlement discussions, the Parties agreed on the methodology for calculating the Energy Cost Adjustment Factor ("ECAF"), including the inclusion of fuel additives, fuel trucking, the addition of the "DG Component," and the use of three fixed efficiency factors to replace the single Central Station efficiency factor at present rates, as proposed in HECO T-9. HECO will continue to annually file calibration reports with the Commission and the Consumer Advocate. See Stipulated Settlement Letter, Exhibit 1, HECO T-9 Attachment 7. This factor incorporates the Consumer Advocate's $620,000 adjustment to the test year purchased power expense projection.

75. On October 20, 2008, the Governor of the State of Hawaii, the Department of Business Economic Development and Tourism, the Consumer Advocate and the Companies executed the Energy Agreement which laid out a comprehensive set of actions to move Hawaii away from the use of imported fossil fuel for electricity and transportation and towards indigenously produced renewable energy and an ethic of energy efficiency. The parties to the agreement recognized the need to assure that Hawaii preserves a stable electric grid to minimize disruption to service quality and reliability and the need for a financially sound electric utility, as both are vital components for achievement of an independent renewable energy future. See Energy Agreement at 1.

76. Although the Energy Agreement codified a wide range of commitments, projects and programs for the Companies, it did not specify any changes to the structure or the risk sharing formula of the Companies' ECAC. Rather, it called for the Commission to periodically

review and approve the prudence and effectiveness of the Companies' fuel and energy procurement practices to ensure that the requirements of the ECAC are met and for the Commission to examine whether there is renewable energy which the utility did not purchase or whether alternate purchase strategies were appropriately used or not used. In fact, the Energy Agreement called for expanding the scope of energy adjustment clauses in Hawaii, stating that the Companies will be allowed to pass through reasonably incurred purchase power contract costs, including all capacity, O&M and other non-energy payments approved by the Commission (including those acquired under a feed-in tariff) through a separate surcharge, and the surcharge will be adjusted monthly and reconciled quarterly. It also stated that the Companies may engage in limited hedging and forward contracting for both energy and fuel, using guidelines and practices to manage both cost and risk, as approved by the Commission. Energy Agreement at 35-36.

b.

HECO's ECAC Complies with Act 162

(1) Fuel Adjustment Clauses

77. FAC mechanisms (and other cost-adjustment mechanisms) give utilities a reasonable opportunity to recover their legitimate costs of procuring electricity on behalf of customers. By providing timely cost recovery for power costs, the amount of time between rate cases - called "regulatory lag" - can increase. Dr. Makholm stated that the three classic reasons for an FAC include:

(1) The purchased item (most commonly fuel) is outside the control of the buying utility.

(2) The item is a significant or large component of the utility's total operating costs.

(3) The cost changes with respect to that item can be volatile and unpredictable.

78. It is not necessary that individual cost items be large, volatile and unpredictable to qualify for FAC treatment. An effective FAC covers all purchased energy costs, including renewable sources, on an equal footing. HECO T-21 at 4.

79. With respect to the first reason for an FAC, utilities procure fuel from markets and would normally not have the ability to control the price set in those markets. Moreover, the utility does not normally have the ability to control its customers' demand. It must procure the fuel and purchased power that are needed to meet customer demand as part of its obligation to serve. HECO T-21 at 4-5.

80. With respect to the second reason for a FAC, fuel and purchased power costs continue to be a significant component of a utility's total operating costs. HECO's consolidated fuel and purchased power expenditures represented about 66.8 percent of expenses in 2005, up from 64.1 percent in 2004 and 62.0 percent in 2003. See HECO T-21 at 5-6.

81. With respect to the third reason for a FAC, changes in fuel and purchased power costs can be volatile and unpredictable. Although HECO is isolated from the wholesale electricity and natural gas markets, its primary source of fuel and purchased power expenses are dependent upon the market price for oil, which constitutes about 79.3 percent of HECO's fuel mix. HECO T-21 at 7-8.

82. Dr. Makholm stated that FACs are prevalent throughout the U.S. Of the 32 traditionally regulated states, only Utah and Vermont lack FACs. In Hawaii, each of the utilities operates under a similar fuel clause, the ECAC. See HECO T-21 at 8-10.

(2) HECO's ECAC

83. HECO's ECAC is an automatic adjustment provision in its rate schedules that allows the Company to automatically increase or decrease charges to reflect the change in the

Company's energy costs of fuel and purchased energy above or below the levels included in the base charges without a rate proceeding. The purpose of ECAC is (1) to address price changes in the Company's cost of fuel and purchased energy and (2) to accommodate changes to the actual mix of generation, DG and purchased energy resources, without the need for a rate case. HECO T-9 at 54-55.

84. The ECAC works as follows: A rate case proceeding determines the base electricity rates into which are embedded test year levels of fuel prices, payment rates for purchased energy and a test year resource mix. The ECAC mechanism, expressed in cents per kilowatt-hour, allows the Company to recover costs due to subsequent changes in (1) fuel and purchased energy costs, (2) the resource mix between utility-owned generation, utility-DG and purchased energy, (3) the resource mix among the utility plants, and (4) the resource mix among purchased energy producers. Prior rate case proceedings established a fixed efficiency factor, or sales heat rate, for the utility central station generation to encourage efficient operation of the system units. An ECA Factor, which sets the rate adjustment that reflects these changes for the coming month, is filed with the Commission monthly. HECO T-9 at 55.

85. The efficiency factor in the ECAC is a measure of how efficiently HECO expects to convert the fuel burned in its generating units into a kWh of sales during the test year. It is expressed in million btus per kWh. If the Company converts fuel into kWh more efficiently than this factor, it will get to keep the savings. But if the Company converts fuel into kWh less efficiently than this factor it will not be able to recover the additional cost from customers. In effect, the efficiency factor acts as a standard which the Company must meet to avoid under-recovery of its fuel expense and provides an incentive for the Company to operate its units as efficiently as possible. HECO T-1 at 34.

86. All costs that pass through the ECAC must result from fuel oil and purchased energy contracts and/or agreements that have been approved by the Commission. HAR § 6-60-6(2). In this manner, the Commission exercises its oversight of the costs passed through the ECAC.

87. The ECAC contains a quarterly reconciliation for the previous quarter's actual experienced fuel and purchased power expenses on a per kWh basis relative to the forecasted amounts. This reconciliation ensures the timely recovery of fuel and purchased power costs for HECO. HECO T-21 at 10.

88. Dr. Makholm found that HECO's ECAC compares well to the FACs that are used in traditionally-regulated jurisdictions in the U.S. HECO T-21 at 10-11.

89. The Company needs the ECAC because fuel costs are a large portion of its expenses and because fuel price levels are largely beyond the Company's control. In the test year, fuel and purchased energy expenses make up about 72% of total operations and maintenance ("O&M") expenses. This makes the Company's financial condition very sensitive to changes in fuel prices. The ECAC benefits the Company and its shareholders by:

(1) Limiting the swings in cash flow and earnings,

(2) Reducing the cost of capital,

(3) Improving the Company's ability to earn a fair return on investor capital, and;

(4) Providing a more timely recovery of fuel and purchased energy costs.

HECO T-9 at 57; HECO T-1 at 33.

The ECAC also benefits customers by:

(1) Reducing the Company's financial risk and lowering the cost of capital. The resulting savings are passed on to our customers through lower base rates in rate proceedings such as this one.

(2) Passing through to customers, the savings incurred when fuel prices fall below the prices embedded in base rates, to the same extent that they will incur additional costs when fuel prices are above the embedded fuel prices.

HECO T-9 at 57; HECO T-1 at 34.

(3) HECO's ECAC Complies with Act 162

90. Act 162 incorporates five requirements for the design of any public utility automatic rate adjustment.

(a) Fair Risk Sharing of Fuel Cost Changes Between the Public Utility and Its Customers

91. The current level of ECAC fuel price risk-sharing is appropriate, and no change is necessary to the current ECAC risk-sharing approach.

92. Dr. Makholm testified that the design of the current ECAC mechanism fairly shares the risk of fuel cost changes between the public utility and its customers. HECO T-21 at 11-14. Fuel cost changes include fuel price changes and fuel efficiency changes. Under the existing ECAC, customers generally bear the risk of fuel price changes and shareholders generally bear the risk of fuel efficiency changes. Customers pay less when actual fuel prices decline, and customers pay more when actual fuel prices escalate. In establishing a fair rate of return on equity, the Company's current ECAC is assumed to continue (see Dr. Morin's discussion in HECO T-18). The concept that shareholders do not make any profit from fuel price changes is therefore embedded in the return on equity recommendation. HECO T-19 at 21.

93. The risk associated with meeting the efficiency factor is one that HECO, at least at this time, can address through the overhaul and maintenance of its generating units and unit commitment schedule among others. Thus, it is reasonable for the Commission to hold the Company responsible for not meeting the efficiency standard and for its fuel expenses to be subject to the risk of non-recovery as a result. HECO T-9 at 66.

94. However, fuel prices are subject to market forces and geopolitical events that HECO cannot control. A risk-sharing mechanism that penalized the Company because prices increased above an expected base price, even one which provided a symmetric positive incentive when prices were below the base, would hold the Company financially responsible for events beyond its control. Such a risk-sharing mechanism would place the Company in an untenable financial position, for which it is not compensated. Therefore, the current level of ECAC risk-sharing is appropriate, and no change is necessary to the current ECAC risk-sharing approach. HECO T-9 at 66.

95. Dr. Makholm testified that partial pass-through mechanisms are rare and have been adopted for utilities with no existing FAC in place and should not be considered as a viable option for the sharing of fuel and purchased power costs in Hawaii. HECO T-21 at 26-29

96. As Dr. Makholm noted, the potential costs associated with improperly assigning power cost recovery risk to the utility could harm the utility's financial health, its credit rating and its ability to raise capital from the financial markets. Accordingly, if a utility only partially recovers its power costs through its FAC, investors will require a higher return on their capital to reflect the riskier investment. While a partial pass-through of power costs may initially reduce the level of rates when unexpected fuel price increases occur, it will ultimately lead to higher costs to consumers. HECO T-21 at 14.

97. Thus, any new or modified fuel cost recovery mechanism that results in increasing investors' risks associated with fuel and/or purchased energy would require an increase in investor compensation through a higher cost of capital for bearing the increased risks. Customers would ultimately bear the higher costs for this increase in cost of capital.
HECO T-21 at 11-14; HECO T-19 at 23.

98. Investors are very sensitive to financial strength considerations when they decide where to invest their money. If the Company's financial strength is not maintained, more risk averse investors will invest their money elsewhere. This in turn, will decrease demand for the Company's securities and raise its cost of capital, thereby hurting HECO's customers. The Company is currently rated BBB by S&P, which is of particular concern because that rating puts the Company only one notch above the minimum "investment grade credit rating". (Standard & Poor's rating of BBB- or higher is considered "investment grade".) Companies with credit ratings below "investment grade," or at junk bond status, find it difficult, if not impossible, to raise new capital. HECO T-19 at 5-6. See also Docket No. 2008-0083, HECO T-20 at 10-12.

99. Increases to the Company's business risk profile and weakening of the Company's credit quality will negatively impact the Company's ability to obtain financing at a reasonable cost. This could hamper the Company's ability to finance new investments, to maintain and enhance existing facilities as well as to increase infrastructure to support further renewable development. The increased financing costs will increase the Company's revenue requirement and ultimately increase rates. See HECO T-19 at 5-35.

(b) Sufficient Incentive to Reasonably Manage or Lower Its Fuel Costs and Encourage Greater Use of Renewable Energy

100. The second condition required by Act 162 is that automatic rate adjustment mechanisms be designed to "[p]rovide the public utility with sufficient incentive to reasonably manage or lower its fuel costs and encourage greater use of renewable energy."

101. The second condition is closely tied to the first one. HECO's targeted efficiency factor promotes productive fuel use decisions and gives HECO an incentive to reasonably manage or lower its fuel costs. If HECO achieves more efficient plant performance than the level of the efficiency factor then it sees a reward. If HECO fails to meet this target for some

reason, then HECO would not be able to recover the additional purchased fuel expenditures required to produce the kWhs. HECO T-21 at 15.

102. Like purchasing fuel oil from the oil markets, purchasing energy from renewables is not without risks. To ensure the efficient use of renewable resources, the ECAC should cover all purchased energy costs, including renewable sources, on an equal footing. Currently, the ECAC is adjusted each month for changes in the energy mix of the sources of fuel and purchased power. Under an equal footing structure, there is no disincentive from a cost recovery standpoint to purchase renewable energy. The encouragement of renewable energy above and beyond a treatment paralleling non-renewables (i.e., direct subsidization) is a matter of public policy and should not be confused with energy cost recovery. HECO T-21 at 15-16.

103. Dr. Makholm pointed out that a frequently updated and well-designed FAC mechanism also supports renewable resource development. The ECAC has positive financial implications and can improve a utility's credit ratings, thereby moderating the cost of capital borne by ratepayers. Because the utility serves as a counter-party for renewable energy companies, the credit standing of a utility frequently serves as an important determinant of renewable energy projects' ability to raise capital, and thus, improve reliability and resource diversity. Weakening the utility's credit rating through partial power cost recovery could harm renewable resources that rely on utility counter-party credit to support their investments. HECO T-21 at 16.

104. In addition, Dr. Makholm noted that, just as it is proper in the pursuit of economic efficiency for utilities to have incentives to efficiently manage costs over which they have control, economic efficiency is also served if ratepayers have a cost-based price signal.

105. There is no indication that the ECAC discourages the use of renewable energy.

(1) HECO and its sister utilities are already moving aggressively on renewable activities. They already have significant renewables on their systems (HPOWER, HC&S, PGV, HRD, KWP) and new projects are on the way, especially in the area of wind (Apollo). As the Consumer Advocate indicated in its Statements of Position filed on November 8, 2004 in Docket Nos. 04-0128 and 04-0129, HECO's "use of the ECAC to address the changing price of fuel does not appear to have diminished its effort in research and utilization of renewable energy."

(2) The current ECAC allows the Companies to bring on new as-available renewable purchase power agreements without rate proceedings, including those with prices that are de-linked from the price of oil. Thus, a major potential disincentive to the Companies has been removed, because they can immediately pass on the costs of renewable projects. Firm renewable projects can be added without a rate case due to the availability of the firm capacity surcharge for nonfossil fuel producers, plus the ECAC. HECO T-1 at 36.

(3) Instead of changing the ECAC to change how the Companies view oil, and to encourage them to seek more renewables, it makes sense to look at mechanisms that directly incentivize the Companies to engage in renewable activities, which is exactly what the Commission is doing in the Renewable Portfolio Standard ("RPS") workshops, without causing major harm to the financial health of the Company. Docket No. 04-0113, Tr. (9/16/05) at 48.

HECO T-1 at 36.

(c) Mitigating the Risk of Sudden or Frequent Fuel Cost Changes that Cannot Otherwise Reasonably Be Mitigated through Other Commercially Available Means, Such As Fuel Hedging Contracts

106. The third requirement under Act 162 requires "the public utility to mitigate the risk of sudden or frequent fuel cost changes that cannot otherwise reasonably be mitigated through other commercially available means, such as fuel hedging contracts."

107. A utility can mitigate the risk of fuel cost changes through two forms of hedges: (1) Physical hedges, such as long-term supply and purchased power contracts and maintaining fuel inventories; and (2) Financial hedges. In HECO T-22, Mr. Meehan surveyed the potential financial hedging instruments that are available to HECO and their potential impacts.

108. Mr. Meehan stated that utilities do not hedge in order to obtain the best or lowest possible price for fuel because that would not be hedging, it would be speculating. Any fuel

hedging program with the objective of "timing the market" and "buying low," is not a hedging program. Utilities have no specialized expertise in identifying trends in world oil markets and cannot be expected to predict market high and low points. That job is left to professional traders and speculators. A utility should not be asked to speculate on behalf of its customers. Moreover, a utility should not bear any financial risk or reward related to the timing of hedge execution. Utilities hedge to lock in a current market price and reduce fluctuations and not to minimize fuel acquisition costs. HECO T-22 at 16.

109. Mr. Meehan discussed the three hedging strategies that are commonly used by buyers of commodities, including forward or futures contracts, call option contracts and collars (which are portfolios containing call option contracts and put option contracts). HECO T-19 at 19-22.

110. There are factors that can prevent hedging from achieving the goal of safe, adequate and reliable service at the lowest reasonable cost:

(1) The liquid forward and futures contracts that are traded in the marketplace do not extend beyond a term of 18 months. The most liquid (i.e., readily-available to trade) fuel hedging contracts are contracts that cover time periods of up to six months into the future. Long-term hedging – i.e., hedging for more than one year in the future – cannot reasonably be achieved through commercially available fuel hedging contracts. HECO T-22 at 5-6, 23 and HECO-2201. Given this, price hedging should not be expected to address rate periods of more than one year at a time. HECO T-22 at 6, 8-9.

(2) Hedging does not provide for lower electricity prices. Locking in a price for oil today or at some fixed point for delivery in the future does not provide for a lower

price, just a known price. The price locked in may well be higher than the price in the future at which HECO actually purchases oil. It only increases predictability, which may not be perceived as beneficial by all customers. HECO T-22 at 4. The trade-off is an expected increase in rate stability at the cost of higher expected costs, as recognized by the National Regulatory Research Institute ("NRRI"):

> Hedging, in its purest form, does not provide a means to reduce the expected price of gas for a utility. Rather, from the consumers' perspective its primary function is to stabilize prices. Generally, risk-adverse consumers should be expected to pay extra for shouldering less risk, such as exposure to volatile prices.

HECO T-22 at 11-12 (citing Ken Costello, "Regulatory Questions on Hedging: the Case of Natural Gas," National Regulatory Research Institute, February 2002, p. 17. Reprinted in Electricity Journal, May 2002, p. 51).

In fact, customers can expect to pay more if HECO adopts fuel hedging. These costs are incremental to the fuel acquisition costs when fuel is not hedged. It is not at all clear that increased predictability is worth the extra costs. HECO T-22 at 4, 7, 26.

(3) Hedging is imperfect. HECO could not buy derivatives that correspond exactly to the product that will be acquired. Mr. Meehan's review of the over-the-counter oil derivatives markets turned up no visible contracts for the specific fuels that are referenced in HECO's fuel supply contracts. This means that HECO would have to bear the basis risks or pay a premium to shift those risks to a third-party via a customized swap, which may be expected to increase average costs for customers. (Basis risk is the difference in price movement between the derivative used to

hedge and the price movement in the product that will actually be bought.) HECO T-22 at 9-10. In HECO's case, basis risk would be substantial because the indexes in HECO's oil contracts are not traded in the most liquid and transparent derivatives markets and because the closest substitutes are only traded in less liquid and less transparent derivative markets. Mr. Meehan also looked at several years of historic data and found that HECO would have a difficult time placing effective hedges. HECO T-22 at 4-5, 22-23; HECO-2206 (illustrating the potential size of basis risks). In addition, the fuel hedging contracts that are available in the marketplace are for fixed quantities. HECO's customers would bear market risk exposure for incremental or decremental quantities relative to the fixed quantity that is hedged by HECO. HECO T-22 at 24-25; HECO-2208 (illustrating the variable quantities needed for each type of oil used by HECO).

(4) If HECO engages in hedging, HECO may face credit risk. Market practice is to mark forward contracts to market and to collateralize the credit exposure embedded in forward contracts, which means that the value of the contract is calculated every day and any exposure must be covered as margin. If HECO engages in hedging, counterparties may require that HECO provide collateral. The provision of collateral would add to the cost of hedging. Further, HECO would in most instances be exposed to the risk of counterparty default and non-performance. HECO T-22 at 25.

(5) The execution of fuel hedging contracts would expose HECO to liquidity risks. Liquidity is the ability to execute transactions in the marketplace. Markets that

are highly liquid have active trading and many buyers and sellers. Market liquidity for oil derivatives ebbs and flows. HECO T-22 at 25-26.

111. Mr. Meehan concluded that:

(1) While HECO could partially hedge against oil price risk for periods of just over a year into the future, there would be considerable costs to doing so. HECO T-22 at 6.

(2) Based on his review of HECO's existing physical fuel contracts and his review of available price hedging products in the marketplace, Mr. Meehan found that HECO would not be able to eliminate all of the risk of oil price fluctuations. This means that even if HECO were able to hedge the published assessment, the final cost of delivered oil would remain subject to residual price risks that could not be hedged. HECO T-22 at 6, 9-10.

(3) Gains and losses are a natural part of hedging. Were HECO to hedge, it would encounter periods during which it experienced gains on its hedges and other periods during which it experienced losses. The gains in large part would be offset by increased fuel purchase costs and the losses in large part would be offset by reduced fuel purchase costs. The ECAC framework would need to be revised so that the difference between the gains and increased fuel costs and the difference between the losses and reduced fuel costs were reflected in rates through the ECAC. HECO T-22 at 6-7, 10-11.

(4) There are certain explicit costs to hedging, and if pursued, HECO would face new risks that it does not currently face. <u>See</u> HECO-2202. These risks and costs lead to fuel costs from hedging that can be expected on average to be higher.

(5) It would not be reasonable for HECO to take the position of a principal and speculate in the oil market with shareholders assuming the risk of oil derivative gains and losses. The motivation for hedging would be to provide rate stability for customers. HECO would thus be entering into hedges on behalf of customers, not on its own behalf. It is logical that customers bear the risks and rewards of hedging. Under the regulatory compact, shareholders bear certain risks and reap certain rewards. However, gains or losses on hedges that were entered into on behalf of customers under the direction of the Commission should not be shareholder responsibility. HECO T-22 at 7, 12.

(6) Even if rate smoothing is a desired goal, there may be more effective means of meeting the goal. There is no compelling reason for HECO to use fuel price hedging as the means to achieving the objective of increased rate stability. HECO T-22 at 6.

112. Mr. Meehan recommended that any exploration into hedging by HECO recognize the following:

(1) There is no business reason for HECO to hedge and the benefits to customers are unclear;

(2) Fuel (oil) hedging by HECO will be expected to result in increased customer costs and as such should only be seriously considered if there is a countervailing benefit;

(3) Fuel hedging by HECO may be able to reduce oil price-induced fluctuations in customer rates, but would not eliminate such fluctuations. While rate stability

may be a countervailing benefit to the costs of hedging, hedging will provide, at best, more and not absolute rate stability;

(4) If fuel hedging were to be implemented, fuel hedging objectives would need to be developed in close consultation with regulators and customers and approved a priori as hedging by HECO on behalf of customers and not for HECO's shareholders account; and,

(5) If HECO were to implement fuel hedging it should not speculate by attempting to time the market to minimize oil purchase costs. HECO T-22 at 17.

(6) Limitations on HECO's ability to hedge that are a function of marketplace realities and the implications of hedging on its financial position should be carefully considered. HECO T-22 at 17.

113. Dr. Makholm stated that if there is a demand from customers and/or a mandate from the Commission acting on behalf of ratepayers, then recovery of the hedging and risk premium costs associated with physical and financial hedges should be included in the ECAC. However, there are other alternatives available, such as budget billing and fixed rate billing, that may provide the benefits sought through hedging programs (rate stability), and which would not require pursuing these potentially costly options. HECO T-21 at 20-21.

(d) <u>Preserving, to the Extent Reasonably Possible, the Public Utility's Financial Integrity</u>

114. The fourth requirement of Act 162 is to "[p]reserve, to the extent reasonably possible, the public utility's financial integrity."

115. The design of the current ECAC mechanism preserves, to the extent reasonably possible, HECO's financial integrity. The current ECAC mechanism is a strength in HECO's business risk profile and contributes to the Company's financial integrity. The monthly

timeliness of the existing ECAC also minimizes the recovery time period, further reducing investor uncertainty with respect to recovery of fuel costs.

116. Mr. Makholm testified that, a FAC generally, and HECO's ECAC specifically, preserves the financial integrity of a utility and HECO in particular. For modern utilities that operate in a world of volatile fuel prices, a FAC is critical to:

(1) Reduce the volatility of utility earnings. Companies exhibiting large earnings volatility are typically those with the most difficulty in tracking input costs.

(2) Provide the utility with a reasonable opportunity to recover its prudently-incurred costs in rates.

(3) Lower the risks to capital invested in a utility and thus lower the utility's cost of capital (and ultimately, rates) as well as help maintain the utility's credit rating. Volatile wholesale power and oil and gas commodity markets have led the rating agencies to more closely scrutinize cost-recovery mechanisms. Credit rating agencies, for example, recognize the need for robust and frequently updated FAC mechanisms. HECO T-21 at 21; see HECO-2101, which presents a selection of statements from the three major credit rating agencies detailing the critical role of power cost recovery in their credit rating evaluation process.

(4) Maintain HECO's ability to raise capital. Because oil and other fuel expenses are a large portion of HECO's operational costs, the ECAC is necessary because it allows HECO to raise capital at a reasonable cost in good markets and bad. HECO T-21 at 21-22.

117. Utility regulators have long recognized the crucial role that cost-recovery mechanisms play in allowing the utility an opportunity to recover its costs. FACs permit a utility to recover its costs and assure the capital markets that the company can meet its obligations to shareholders and bondholders. HECO T-21 at 22 (citing commission decisions from Colorado and Arizona).

(e) Continuation of the ECAC Will Allow HECO to More Readily Raise Capital in the Future, which Will Improve HECO's Ability to Meet Future Infrastructure Needs and Preserve the Level of Service Demanded By Its Ratepayers and the Commission.

118. The ECAC serves to reimburse HECO for prudently-incurred energy costs in a manner that minimizes the negative financial effects caused by regulatory lag. As Dr. Roger Morin, HECO's expert witness on the cost of common equity, explained in HECO T-18, consideration of energy costs in a manner that lowers uncertainty and risk "represents the mainstream position on this issue across the United States. Accordingly, the financial community relies on the presence of energy cost recovery mechanisms to protect investors from the variability of fuel and purchased power costs that can have a substantial impact on the credit profile of a utility, even when prudently managed." HECO T-18 at 70.

119. The record also indicates that bond rating agencies would place considerably more weight on the Company's purchased power contracts as debt equivalents in the absence of ECAC, thus weakening the Company's financial integrity. The ECAC mitigates a portion of the risk and uncertainty related to the day-to-day management of a regulated utility's operations. Conversely, the absence of such protection would be factored into the Company's credit profile as a negative element, which in turn would raise its cost of capital. HECO T-18 at 70.

120. Dr. Morin added that the "approval of energy cost recovery mechanisms by regulatory commissions is widespread in the utility business. Approval of fuel adjustment clauses, purchased water adjustment clauses, and purchased gas adjustment clauses has become widespread. All else remaining constant, such clauses reduce investment risk on an absolute basis and constitute sound regulatory policy." HECO T-18 at 70.

121. Ms. Sekimura, HECO's Financial Vice President,[14] explained that HECO's investors view the Company's existing ECAC mechanism favorably, because it significantly reduces the risks associated with HECO's business. Dependence on imported fuel oil and the

[14] Ms. Sekimura was Financial Vice President at the time of the filing of her direct testimony. Her current title is Senior Vice President, Finance and Administration.

associated fuel price fluctuation are significant risks in HECO's business. The monthly revenue adjustment for fuel and purchased energy price changes results in timely recovery of fuel oil and purchased energy costs, which significantly reduces the business risk profile. Thus, the existing ECAC has a positive credit quality impact. HECO T-19 at 18-19.

122. S&P has often cited the existing ECAC mechanism as a strength in HECO's credit quality assessment. S&P has in the past cited "an excellent fuel adjustment clause" as strengthening credit quality in part offsetting "reliance on fuel oil," "significant purchased power obligations," and "high prices" which weaken credit quality.

123. Conversely, the potential to have changes to the existing ECAC has raised concerns with the rating agencies as noted in S&P's credit assessment of HECO dated November 22, 2006. In its credit assessment of HECO dated November 22, 2006 , S&P stated in part:

> Of some concern is Hawaii's Act 162, a new law which appears to confirm, in light of the state legislature's interest in promoting renewable energy, the PUC's ability to authorize the utility's fuel adjustment clause. Although no parties to the rate case seem to oppose the continuation of the clause, a material change to fuel-adjustment mechanism would harm the company's financial condition and detract from its currently satisfactory business profile.

HECO T-19 at 22; HECO-1910.

124. It is essential that the potential creditor and shareholder implications of any change to the ECAC be carefully and thoroughly considered before implementation. HECO T-19 at 23-24.

(f) <u>Minimizing, to the Extent Possible, the Public Utility's Need to Apply for Frequent Applications for General Rate Increases to Account for the Changes to Its Fuel Costs</u>

125. The fifth requirement of Act 162 is to "[m]inimize, to the extent possible, the public utility's need to apply for frequent applications for general rate increases to account for the changes to its fuel costs."

126. The design of the current ECAC mechanism minimizes, to the extent reasonably possible, the public utility's need to apply for frequent applications for general rate increases to account for the changes to its fuel costs.

127. Mr. Meehan testified that, in general, FACs are designed to reduce regulatory costs by separating the volatile fuel costs from the base rates. A prime motivation for FACs is a reduction in base rate cases. The reduction of frequent base rate cases does not reduce the Commission's oversight of HECO's fuel and purchased power expenditures. Electricity FACs can allow for recovery of narrowly-defined categories of fossil fuel costs, nuclear fuel costs, purchased power, fuel transportation costs, and hedging costs, among others. HECO submits calculations supporting the ECAC to the Commission for review on a monthly basis. HECO T-21 at 23-24.

128. Ms. Sekimura explained that, currently, fuel price is not a driver for determining when a rate case is needed. If base rates are set at a time when fuel prices are relatively low, the ECAC will be positive when fuel prices rise. Conversely, if base rates are set at a time when fuel prices are relatively high, the ECAC will be negative. For example, if HECO had had a rate case based on a 2000 test year and the base rates were established which incorporated the actual fuel price in 2000, the ECAC in 2001 and 2002 would have been negative and the ECAC in 2003 would have been positive. HECO T-19 at 22.

129. The fuel oil prices used to establish base rates set the "base" in determining whether ECAC is positive or negative. Since under the current ECAC customers will bear nearly

all the costs associated with fuel price changes, it does not matter what portion of the fuel cost is reflected in base rates and what portion gets reflected in ECAC. In HECO's 2005 test year rate case (Docket No. 04-0113) the Company, the Consumer Advocate and the DOD were able to agree on fuel price estimates, since the ECAC will adjust revenues to reflect the actual cost of fuel. HECO T-19 at 21-22.

130. Dr. Makholm stated that to further minimize regulatory costs, regulators can see that any other cost category that meets the three criteria for an automatic rate adjustment discussed in the background section receive parallel treatment to those costs already included in the ECAC. Cost categories to consider tracking separately include the following:

(1) All fuel and purchased power costs,

(2) Purchased capacity (especially considering the discussion of renewables),

(3) Hedging costs,

(4) Environmental compliance costs, and

(5) Any other costs specific to the jurisdiction that meet the three criteria discussed earlier.

HECO T-21 at 24.

131. The ECAC or a similar adjustment mechanism can be implemented efficiently for other costs that are large, volatile and beyond the control of the utility. Also, adjustment and cost tracking mechanisms may be implemented to allow for the parallel treatment of similar costs categories. For example, DSM costs provide a substitute for pursuing supply-side resources. If supply-side resources are recovered under an FAC, DSM costs could be treated symmetrically, which would treat supply- and demand-side energy costs on an equal footing. HECO T-21 at 24-25.

c.

ECAC Summary

132. As explained above, HECO's current ECAC complies with the provisions of Act 162. Given the Energy Agreement between HECO and the Consumer Advocate, which documents a course of action to make Hawaii energy independent, and recognizes the need to maintain HECO's financial health in order to achieve that objective, as well as the overwhelming support in the record for the ECAC in its current form, there appear to be no further issues regarding the ECAC to be resolved in this rate case.

B.

Revenues

1.

Test Year Estimated Electricity Sales and Customers

133. HECO's estimate of total electricity sales for the 2007 test year is 7,720.8 gigawatt hours ("GWH"). HECO-201; HECO T-2 at 1. The Parties agreed with HECO's test year estimate of total electricity sales. Stipulated Settlement Letter, Exhibit 1 at 1.

134. HECO's estimate of the average monthly number of customers for the 2007 test year is 295,620. HECO-201; HECO T-2 at 1. The Parties agreed with HECO's test year estimate of the average monthly number of customers. Stipulated Settlement Letter, Exhibit 1 at 1.

2.

Electric Sales Revenues

135. HECO's total electric sales revenues in direct testimony, based on the test year sales estimate and average number of customers at present rates, at current effective rates, and at

proposed rates, for the 2007 test year were $1,346,379,000, $1,398,279,000 and $1,497,066,000, respectively. HECO-301; HECO T-3 at 2.

136. In its June 2007 Update (June 27, 2007), HECO T-3, page 4, HECO included eight months of revenues in the test year for the interim surcharge for DG fuel and trucking and low-sulfur fuel oil ("LSFO") trucking costs (at current effective rates) as approved by Order No. 23377 in Docket No. 04-0113. In their respective direct testimony filings, both the Consumer Advocate and the DOD proposed to include twelve months of revenues (i.e., $5,358,200) for this surcharge in the test year. See DOD T-1, page 30 and CA-T-1, page 22.[15] HECO agreed to include $5,358,200 of revenues in the test year, which constitute twelve months of revenue for the interim surcharge for DG fuel and trucking and LFSO trucking costs. Stipulated Settlement Letter, Exhibit 1, page 1.

137. Incorporating the above adjustment, the Parties agreed that HECO's total electric sales revenues at current effective rates were $1,406,573,200 for the test year. Stipulated Settlement Letter, Exhibit 1 at 1. (This is the sum of $837,698,900 of base revenues, ($3,190,700) of AES credit, $566,706,800 of fuel oil adjustment ("FOA"), and $5,358,200 of interim surcharge revenues. See August 2007 Supplement (September 6, 2007), HECO T-3, Attachment 1 at 1.

138. As explained in paragraph 38 above, HECO filed a Motion to Adjust Interim Increase in this proceeding to adjust the interim increase for the 2007 test year from $69,997,000 to $77,867,000, which the Commission approved on June 20, 2008. As explained in the motion (pages 13-14), the electric sales revenues based on the final rates implemented in Docket No. 04-0113 were reduced from $1,406,573,000 to $1,398,765,000, primarily as a result of the disallowance of the pension asset (net of ADIT) from rate base in the 2005 test year Final D&O.

[15] See August 2007 Supplement (September 6, 2007), HECO T-3, Attachment 1, page 1.

139. As explained in paragraph 42, HECO filed a correction to its revenue requirement on September 30, 2008, which reduced the interim increase from $77,867,000 to $77,466,000. The correction did not revise the electric sales revenue test year estimate of $1,398,765,000 based on the final rates implemented in Docket No. 04-0113. See Revenue Requirement Correction, Exhibit 1, page 1.

140. ECAC revenues are discussed in the Fuel Expense section, below.

3.

Other Operating Revenues

141. In direct testimony, HECO's 2007 test year other operating revenues were $1,695,000. HECO T-13, page 33 and HECO-1312.

142. Miscellaneous other operating revenues were decreased by $71,000 in the June 2007 Update (June 15, 2007), HECO T-13, page 4, from $1,695,000 to $1,624,000. Amortizations of deferred gains were decreased by approximately $7,000 due to a delay in the sale of the Aiea Park Place property, and property licenses and leases revenues were decreased by $64,000 (from $280,000 to $216,000), as explained in the responses to CA-IR-299, 449 and 450, and the June 2007 Update (June 15, 2007), HECO T-13, page 4. The Consumer Advocate and DOD did not propose any adjustments to the amounts submitted by the Company. Stipulated Settlement Letter, Exhibit 1 at 1.

143. In addition, in the June 2007 Update (June 29, 2007), HECO T-8, page 2, late payment charges were revised for the updated revenue estimates for the 2007 test year. This resulted in an increase of $2,900 in late payment charges associated with both sales revenues at present rates and sales revenues at current effective rates. See June 2007 Update (June 29, 2007), HECO T-8, pages 2 and 8 (updated HECO-807). The Consumer Advocate did not

propose any adjustment to HECO's updates, and also did not consider an estimate of late payment charges for the Consumer Advocate's recommended increase in revenue requirements. During the settlement discussions, the Parties agreed to resolve their differences as part of a global settlement. As a result, the Parties agreed to multiply HECO's proposed late payment charge factor of .095% by the electric sales revenues at interim rates to determine the late payment charges at interim rates. Stipulated Settlement Letter, Exhibit 1 at 2.

144. Incorporating the above adjustments, the Parties agreed for purposes of settlement that HECO's total other operating revenues at current effective rates for the test year were $3,384,000. See Supplemental Information, HECO T-3, Attachment 1 hereto, for supporting calculation. The test year total other operating revenues at proposed rates were $4,125,000. Statement of Probable Entitlement, Exhibit 1 at 1. The test year other operating revenues based on the final rates implemented in Docket No. 04-0113 increased slightly to $3,406,000, as shown on page 1 of Exhibit A of the Commission's June 20, 2008 Order Granting Hawaiian Electric Company, Inc.'s Motion to Adjust Interim Increase Filed on May 21, 2008 and page 1 of Exhibit 1 of the Motion to Adjust Interim Increase.

145. The September 30, 2008 Revenue Requirement Correction adjusted other operating revenues based on the final rates approved in D&O 24171 in Docket No. 04-0113 to $3,807,000 to account for rate changes approved in that docket. The Revenue Requirement Correction also adjusted other operating revenues at proposed rates to $3,911,000 to comply with the Commission's ruling in D&O 24171 that the Company could not assess the field collection charge to customers when a field call does not result in a successful collection of monies. See Revenue Requirement Correction, page 1; Exhibit 1, page 1.

C.

Expenses

1.

Fuel Expense, Purchased Power Expense, Generation Heat Rate and ECA Factor

a.

Fuel Oil and Fuel-Related Expenses

146. The test year fuel expense represents the cost of fuel required by HECO to produce the energy required, less purchased energy, to meet the projected needs of HECO's customers. The two primary factors in the determination of the test year fuel expense are fuel price and projected fuel consumption (i.e., the quantity of fuel needed to produce the required energy). HECO's 2007 test year net generation heat rates are 10,691 British thermal units per kilowatt-hour ("btu/kwh") for central station generation, 10,609 btu/kwh for steam generation, 31,015 btu/kwh for combustion turbine ("CT") generation and 10,212 btu/kwh for substation DG. See HECO-406. The derivation of fuel expense is discussed in HECO T-4 on pages 10 through 31 and fuel-related expense is discussed in HECO T-4 on pages 31 through 43.

147. Test year fuel oil expense and fuel-related expense were $536,833,000, and $6,128,000, respectively, in HECO T-4, page 1. See also HECO-401 and HECO-405. In HECO's response to CA-IR-214, page 7, and in the June 2007 Update (June 15, 2007), HECO T-4, fuel oil expense and fuel-related expense were increased to $537,767,000 and $6,107,000, respectively. The fuel prices were based on August 2006 fuel prices (HECO T-4, page 10), which were adjusted for the increase in general excise taxes in the test year.

148. The Consumer Advocate recommended fuel oil expense and fuel-related expense estimates of $536,971,000 and $6,100,000, respectively. See CA-101, Schedule C-3 and

CA-201. The DOD reflected HECO's June 2007 Update ($543,847,000) in its test year expense estimates. See DOD-104. The DOD did not propose any adjustments to HECO's June 2007 Update adjustments and total fuel expense and fuel inventory.

149. The positions of the Parties relating to fuel oil expense, fuel-related expense and fuel inventory are summarized in the following table:

	HECO Direct	HECO Update	CA Position (CA-201)	DOD Position (DOD-103-104)
Fuel Oil Expense	$536,833,000	$537,767,000	$536,971,000	
Fuel-related Expense	$6,128,000	$6,107,000	$6,100,000	
Total Fuel Expense	$542,961,000	$543,874,000	$543,071,000	$543,874,000
Fuel Inventory	$52,706,000	$53,084,000	$53,026,000	$53,084,000

150. The differences between HECO and the Consumer Advocate were primarily due to the use of different versions of the P-Month production simulation model. As noted in CA-T-2, page 21, lines 6-7, the Consumer Advocate believes that the results of the two models were comparable and reasonable.

151. For purposes of reaching a global settlement, the Consumer Advocate and the DOD agreed to reflect the results of HECO's production simulation model as presented in HECO's response to CA-IR-214, and the June 2007 Update (June 15, 2007), HECO T-4, for purposes of determining HECO's test year fuel and fuel-related expense. The agreement resulted in $537,767,000 for fuel oil expense (based on August 2006 fuel prices) and $6,107,000 of fuel-related expense for a total test year fuel expense of $543,874,000. See CA-IR-214 at 7. See also Stipulated Settlement Letter, Exhibit 1, at 2.

152. Test year fuel inventory was $52,706,000 in direct testimony (HECO T-4, page 2) and updated to $53,084,000 in the June 2007 Update (June 15, 2007), HECO T-4 and in HECO's response to CA-IR-214, page 18 (updating HECO-408). For purposes of settlement, the Consumer Advocate and the DOD accepted HECO's average test year balance of $53,084,000 as shown in the June 2007 Update (June 29, 2007), HECO T-17, page 7. See Stipulated Settlement Letter, Exhibit 1 at 20.

b.

ECAC Revenues

153. In its direct testimony, the Company estimated $563,541,200 of ECAC revenues for the 2007 test year (at current effective rates and at present rates).[16] The changes in the Company's fuel oil and fuel-related inspection costs and purchased energy costs from the fuel costs embedded in base rates are recovered through the ECAC. At proposed rates, the Company proposed to include in the ECAC the trucking cost of fuel to the Honolulu Plant and fuel additive costs for HECO generating units. DG fuel, trucking costs and fuel-related inspection costs will be included in the ECAC under a new DG energy component, as HECO proposed in Docket No. 04-0113. The Company also proposed to include a weighted efficiency factor in its ECAC calculations (in the same manner that HELCO proposed in Docket No. 05-0315), based on fixed efficiency factors for LSFO, diesel and "other" generating units. Because DG units are generally more efficient than other generating units, the Company proposed not to apply a fixed efficiency factor to DG fuel and transportation costs.

[16] See HECO-WP-301, fuel oil adjustment figures for Schedules R, G, H, J, PS, PP, PT, and F, shown on pages 1, 10, 17, 22, 92, 106, 126, and 134, respectively. The sum total is $563,541,200.

154. In its June 2007 Update (June 27, 2007), HECO T-3, Supplemental, page 4, the Company revised its test year estimate of ECAC revenues to $566,012,100 (at current effective and present rates).

155. In CA-T-1 (at 26-27), the Consumer Advocate agreed that the ECAC should continue to be employed and did not object to the continuation of the ECAC to provide HECO with recovery of changes in energy costs. In CA-T-2, the Consumer Advocate agreed with the Company's proposal to include Honolulu trucking costs, DG fuel and trucking costs and additive costs in the ECAC and to use a three-part sales heat rate for HECO's units. The Consumer Advocate did not oppose HECO's proposal to not subject DG units to a fixed efficiency factor, provided that HECO be required to continue to annually file calibration reports with the Commission and the Consumer Advocate. CA-T-2 at 45-47. In CA-101, Schedule C-3, the Consumer Advocate proposed a reduction of $463,000 to the 2007 test year ECAC revenues (at current effective rates and present rates), based on its calculation of fuel and purchased energy for the test year.

156. In DOD T-3 (at 25-26), the DOD stated that it would be appropriate to use the three efficiency factor approach proposed by HECO and to flow through the actual cost per kWh associated with DG energy without application of a fixed efficiency factor. The DOD accepted the Company's test year estimate of ECAC revenues. Stipulated Settlement Letter, Exhibit 1 at 3.

157. The positions of the Parties relating to ECAC revenues are summarized in the following table:

	HECO Direct	HECO Update	CA Position (CA-201)	DOD Position (DOD-103-104)
ECAC Revenues	$563,541,200[1]	$566,012,100[1]	$565,549,100[2]	$566,012,100[3]

[1] At current effective rates and present rates.

[2] $566,012,100 - $463,000 (CA-101, Schedule C-3).

[3] As shown on DOD-113, the DOD utilized the Company's test year revenues of $1,404,092,000 and $1,348,635,000 (at present and current effective rates) from its June 2007 update. See page 4 of the HECO T-3 June 2007 Update (Supplemental), which shows that these electric sales revenue estimates include $566,012,100 of ECAC revenues.

158. For purposes of the interim rate increase, the Parties agreed that the ECAC should continue in its present form. (See discussion on Energy Cost Adjustment Clause and Act 162 above.) Furthermore, as a result of the settlement discussions, the Parties agreed on the methodology for calculating the ECAF, including the inclusion of fuel additives, fuel trucking, the addition of the "DG Component," and the use of three fixed efficiency factors to replace the single Central Station efficiency factor at present rates, as proposed in HECO T-9. HECO will continue to annually file calibration reports with the Commission and the Consumer Advocate. The Parties agreed that the ECAF at present rates was 7.340 cents/kwh, and that the ECAF at proposed rates was 0.000 cents/kwh. See Stipulated Settlement Letter, Exhibit 1, HECO T-9, Attachment 7 at 8 and 11. This factor incorporates the $620,000 adjustment to the test year purchased power expense projection as explained below.

159. HECO proposed the DG component in Docket No. 04-0113 (HECO's 2005 test year rate case). D&O 24171 in that rate case approved the DG component as stated on page 35: "The Parties agree that the ECAC should continue and that the ECA Factor at present rates is 5.414 cents/kWh. In addition, the Parties agree to HECO's methodology to calculate the ECA

Factor, including the DG component proposed by HECO at HECO RT-10. Upon review of the record, and in light of the commission's decision to allow the continuance of the ECAC, the commission finds HECO's ECA Factors to be reasonable."

160. Applying the 7.340 cents/kwh ECAF to the agreed upon test year forecasted kwh sales projection resulted in ECAC revenues of $566,706,800 (at present rates and current effective rates) for the 2007 test year. See August 2007 Supplement, HECO T-3, Attachment 1, at 1. The Parties agreed that the sales heat rates used in the ECAF as fixed efficiency factors at proposed rates are:

LSFO plants:	0.011143 mbtu/kwh
Diesel plants:	0.034955 mbtu/kwh
Other plants:	0.011209 mbtu/kwh
Weighted average:	0.011209 mbtu/kwh

See Stipulated Settlement Letter, Exhibit 1, HECO T-9, Attachment 7, at 5; see also, June 2007 Update (June 15, 2007), HECO T-9, at 27.

161. As a result of D&O 24171 in the 2005 test year rate case, the 2005 test year levels of fuel and fuel-related expense were incorporated into base rates and the ECAC was accordingly reset. As shown on page 167 of Exhibit 1A of the Memorandum in Support of the Motion to Adjust Interim Increase, the Company recalculated the 2007 test year ECAF at present and current effective rates (1.986 cents/kwh) and computed the ECAC revenues based on the final rates approved in the 2005 test year rate case to be $153,335,100. See Memorandum in Support of the Motion to Adjust Interim Increase, Exhibit 1, at 14.

162. Although the final D&O in the 2005 test year rate case caused a change in the ECAF at present and current rates and the 2007 test year ECAC revenues based on the final rates approved in that rate case, the agreement between the Parties remains unchanged with respect to the methodology for calculating the ECAF, including the inclusion of fuel additives, fuel

trucking, the addition of the "DG Component," the use of three fixed efficiency factors to replace the single Central Station efficiency factor at present rates, the continuation of HECO's annual filing of calibration reports with the Commission and the Consumer Advocate, the sales heat rates to be used in the ECAF as fixed efficiency factors at proposed rates, and the ECAF being 0.000 cents/kwh at proposed rates.

c.

Purchased Power Expense

163. HECO's 2007 test year estimate of purchased power expense in direct testimony was $386,108,107, which consisted of $277,432,042 in purchased energy expenses and $108,676,065 in firm capacity expenses. See HECO T-5 at 1, and HECO-501. The derivation of purchased power expense was discussed in HECO T-5 on pages 1 through 22. The estimate of purchased energy was 3,373 GWh. See HECO T-5 at 2, HECO-403, and HECO-503.

164. The Company's updated purchase power expense for the test year totaled $386,872,000, based on the re-run of its production simulation model. See June 2007 Update (June 15, 2007), HECO T-5 at 3 (updating HECO-501).

	HECO Direct	HECO Updated	CA Position (CA-201)	DOD Position (DOD-104)
Energy Payments	$277,432,042	$278,231,388	$278,838,000	
Firm Capacity Payments	$108,676,065	$108,640,774	$108,680,000	
Total Purchase Power Expense	$386,108,107	$386,872,162	$387,518,000	$386,872,000

165. The DOD did not propose any adjustments to HECO's June 2007 update and purchase power expense.

166. In direct testimony, the Consumer Advocate recommended a test year purchased power expense estimate of $387,518,000, which is $646,000 more than HECO's June 2007 Update. See CA-101, Schedule C-3 and CA-201. In support of its recommendation, the Consumer Advocate noted that the AES base fuel component for one boiler in the month of October was not calculated in HECO's direct testimony and in its June 2007 Update estimates. See CA-T-2, page 34, line 21 to page 35, line 2. During the settlement discussions, HECO agreed with the Consumer Advocate that there was an error in HECO's workpapers and recalculated its AES energy payment. As a result, HECO proposed to increase its AES energy payment by $620,000. See Stipulated Settlement Letter, Exhibit 1, HECO T-5, Attachments 1 and 2, for the calculations supporting the $620,000 adjustment. After the above adjustment, there remained a difference of $26,000 between HECO and the Consumer Advocate. (The difference is equal to the June 2007 Update (June 15, 2007), HECO T-5, page 3, amount of $386,872,000 plus the $620,000 AES adjustment for a total $387,492,000, minus the Consumer Advocate's proposed $387,518,000.)

167. For purposes of settlement, the Consumer Advocate and the DOD agreed to reflect HECO's purchased power expense of $386,872,000 as provided in the June 2007 Update (June 15, 2007), HECO T-5, page 3, plus an additional $620,000 to correct the AES energy charges related to the AES base fuel component in the month of October, for a total purchased power expense of $387,492,000 for the test year. Stipulated Settlement Letter, Exhibit 1 at 4.

d.

Generation Heat Rate

168. The net generation heat rate is a measure of generation efficiency, and represents the heat content of the fuel consumed in British thermal units per net kilowatt-hour generated.

HECO's 2007 test year net generation heat rates are 10,691 btu/kwh for central station generation, 10,609 btu/kwh for steam generation, 31,015 btu/kwh for CT generation and 10,212 btu/kwh for substation DG. See HECO-406.

169. The net generation heat rate directly affects the sales heat rate. The sales heat rate is calculated in a manner similar to the net heat rate, except the sales heat rate is the heat content of the fuel consumed (in btu's) per kwh of sales. The sales heat rate, in the form of a Generation Efficiency Factor, is used in the ECAC to translate the base generation cost in cents per mbtu to the weighted base generation cost in cents per kwh of sales. See HECO T-4 at 44-45. As presented in direct testimony, HECO's Generation Efficiency Factor is 0.011226 mbtu/kwh. See HECO T-4 at 45, and HECO-406.

170. The table below summarizes the fixed efficiency factors proposed by HECO in its June 2007 Update (June 15, 2007), HECO T-9, page 8, page 13 (updating HECO-936, page 4), and page 27 (updating HECO-WP-936), and the efficiency factors proposed by Consumer Advocate. See CA-T-2 at 48, CA-201, and CA-WP-215 at 8.

	HECO June 2007 Update	Consumer Advocate
LFSO	.011143	.011123
Diesel	.034955	.038914
Other	.011209	.011191

171. As stated above in the discussion of ECAC Revenues, the Parties agreed on the Company's proposed sales heat rates used in the ECAF as fixed efficiency factors as shown in the table above, which result in a weighted average of 0.011209 mbtu/kwh. See Stipulated Settlement Letter, Exhibit 1 at 4 and Stipulated Settlement Letter, HECO T-9, Attachment 7 at 5; see also, June 2007 Update (June 15, 2007), HECO T-9 at 27 (updating HECO-WP-936).

2.

Other Production O&M Expenses and Transmission and Distribution O&M Expenses

a.

Other Production O&M Expenses

172. HECO's 2007 test year production O&M expenses (other than fuel oil and purchased power expenses) were estimated to be $68,222,000 in HECO's direct testimony (HECO T-6 , page 2, and HECO-601), which was increased by a net $703,000 to $68,925,000 in the Company's June 2007 Update (June 29, 2007), HECO T-6, Attachment 1, page 1. The production O&M expense estimate was further increased by a net $1,152,000 in the June 2007 Update Supplement (July 25, 2007), HECO T-6, Attachment 1, page 1, resulting in a total test year production O&M expense estimate of $70,077,000. The Consumer Advocate's estimate was $66,436,000 (CA-101, Schedule C, page 1), or $3,641,000 lower than HECO's estimate of $70,077,000, due to the seven adjustments that are discussed below: 1) environmental 316(b) expense update, 2) generation (competitive) bidding division expense update, 3) production O&M labor adjustment, 4) deferred station maintenance list projects adjustment, 5) production department R&D adjustment, 6) expiring software amortization, and 7) abandoned projects normalization adjustment. The DOD also proposed one adjustment to reduce production security services expense by $117,000. All Parties agreed to the Company's production inventory of $6,678,000 as presented in direct testimony. See HECO-1703. The positions of the Parties are summarized in the following table:

	HECO Direct	HECO June 2007 Update	CA Position (CA-101)	DOD Position (DOD-103-104)
Production O&M Expense	$68,222,000	$70,077,000	$66,436,000	$69,960,000
Production Inventory (HECO-1703)	$6,678,000		$6,678,000	$6,678,000

173. Emissions Fee Adjustment. In its June 2007 Update (June 29, 2007), HECO T-6, page 2 and HECO T-6, Attachment 2, the Company reduced its normalized 2007 test year emission fees from $838,000 to $691,000 or a decrease of $147,000 to production operations non-labor expense. The Consumer Advocate and the DOD did not propose any adjustment.

174. Distributed Generation (DG/Dispatchable Standby Generation) Adjustment. In its June 2007 Update (June 29, 2007), HECO T-6, page 2 and HECO T-6, Attachment 1, page 3, the Company decreased its production operations non-labor expense by $55,000 due to the cancellation of the Kaiser DSG project. See also HECO's responses to CA-IR-237 and CA-IR-337. The Consumer Advocate and the DOD did not propose any adjustment.

175. Ho'okina Expense Adjustment. In its June 2007 Update (June 29, 2007), HECO T-6, page 3, the Company decreased its production operations non-labor expense by $42,000 by removing the Ho'okina expense. The Ho'okina volunteer award recognition program was suspended as a result of implementing a targeted compensation program as explained in HECO's response to CA-IR-69. See HECO-WP-101(G), at 887; HECO-1220; and HECO T-6, June 2007 Update (June 29, 2007), Attachment 1, at 4. The Consumer Advocate and DOD did not propose any adjustment.

176. Environmental 316(b) Expense Update. In HECO's June 2007 Update (June 29, 2007), HECO T-6, page 3, HECO proposed to increase its 2007 test year production operations non-labor expense by a 3-year normalized amount of $1,006,000 to comply with the

Environmental Protection Agency's ("EPA") Clean Water Act Section 316(b) Phase II rules. In CA-T-1 (CA-101, Schedule C-6), the Consumer Advocate proposed a $175,000 adjustment, reducing HECO's June 2007 Update (June 29, 2007) expense estimate to $831,000. For purposes of a global settlement, the Company agreed to reflect the Consumer Advocate's proposed adjustment, resulting in $831,000 of environmental expenses for the test year. See Stipulated Settlement Letter, Exhibit 1 at 5.

177. Generation (Competitive) Bidding Division Expense Update. In its June 2007 Update (June 29, 2007), HECO T-6, Attachment 1, page 1, the Company increased its Generation Bidding Division non-labor expense by $243,000. In CA-T-1 (CA-101, Schedule C-7), the Consumer Advocate proposed a $243,000 reduction to allow only the $175,000 level of non-labor expenses initially estimated by HECO to be incurred in 2007, and cited the Company's actual spending through May 2007 as support for its proposed adjustment. During the settlement discussions, the Company provided additional support for its updated estimate of 2007 non-labor costs for this Division, and the reasons for its higher normalized test year estimate. The Consumer Advocate did not dispute that additional future outside services expenses may be incurred by HECO to support competitive bidding, but objected to the inclusion of any costs that are expected to be incurred after 2007 in the test year estimate on the grounds that such inclusion would violate the test year concept. As part of the overall settlement of issues impacting revenue requirements, the Company agreed to reduce its Generation Bidding Division non-labor expense by $243,000, resulting in a total expense projection of $175,000 for the test year. See Stipulated Settlement Letter, Exhibit 1 at 5.

178. Administrator Position Expense Update. In its June 2007 Update (June 29, 2007), HECO T-6, pages 14-16, the Company increased its production operations labor expense by

$38,000 for a new Administrator position. The adjustment was based on a one-half year labor expense estimate in the 2007 test year for the newly created position. The Administrator reports to the Financial Administration group in the Power Supply Operations and Maintenance ("PSO&M") Department and is specifically responsible for the financial administration of O&M expenses for the PSO&M and Power Supply Environmental departments. The Consumer Advocate and the DOD did not propose any adjustment.

179. Fuel Infrastructure Expense Adjustment. In its June 2007 Update (June 29, 2007), HECO T-6, pages 16-18, the Company increased its production maintenance labor expense by $39,000 for a new Fuel Infrastructure Director. The adjustment to the 2007 test year estimate was based on a one-half year labor expense estimate in the 2007 test year for the position, net of estimated billings to MECO (10%) and HELCO (10%). See June 2007 Update (June 29, 2007), HECO T-6, Attachment 7. The Consumer Advocate and the DOD did not propose any adjustment.

180. Engineer Retention Program Expense Update. In its June 2007 Update (June 29, 2007), HECO T-6, page 18, the Company increased its production operations labor expense by $15,000 and increased its production maintenance labor expense by $50,000 for a total of $65,000 for the Engineering Retention Program. The Engineering Retention Program was approved after the 2007 budget was prepared and resulted in permanent increases to engineers' salaries. See responses to CA-IR-69 and CA-IR-297, June 2007 Update (June 29, 2007), HECO T-6, Attachment 1 at 9, and June 2007 Update (June 27, 2007), HECO T-10, Attachment 2 at 1. The Consumer Advocate and the DOD did not propose any adjustment.

181. Distributed Generator Outside Service Expense Update. In its June 2007 Update (June 29, 2007), HECO T-6, page 18, the Company reduced its production operations non-labor

expense from $245,000 to $60,000 or by $185,000. As of the end of May 2007, the actual 2007 expenses for refueling contract services totaled $26,000 and the annualized amount for refueling contract services in 2007 was then expected to be $60,000. See responses to CA-IR-237 and 337 and June 2007 Update (June 29, 2007), HECO T-6, Attachment 1 at 10. The Consumer Advocate and the DOD did not propose any adjustment.

182. Operator Overtime Expense Update. In its June 2007 Update (June 29, 2007), HECO T-6, page 19 and June 2007 Update Supplement (July 25, 2007), HECO T-6, page 1, and Attachment 1, page 2, the Company reduced its production operations labor expense by $402,000 to correct the forecasting error which included both the overtime for a 42-hour per week work schedule as well as the full staffing count to support a regular 40-hour shift schedule. The calculation of the decrease is described in detail in HECO's response to CA-IR-232, revised 07-13-07 and in the June 2007 Update (June 29, 2007) and June 2007 Update Supplement (July 25, 2007) for HECO T-6. The Consumer Advocate and the DOD did not propose any adjustment.

183. Environmental Outside Services Expense Update. In its June 2007 Update Supplement (July 25, 2007), HECO T-6, page 2, the Company reduced its expenses for environmental outside services budgeted in production operations non-labor expense by $126,000. See the response to CA-IR-344 for a detailed explanation of the revised amounts for the Environmental EE 508 expense items. The Consumer Advocate and the DOD did not propose any adjustment.

184. Steam Turbine Overhaul Expense Update. In its June 2007 Update Supplement (July 25, 2007), HECO T-6, page 2, the Company increased its test year estimate for production maintenance non-labor expense by $1,557,000 to correct for the inadvertent exclusion of steam

turbine overhaul expenses. See the response to CA-IR-488 for a detailed explanation and the June 2007 Update Supplement (July 25, 2007), HECO T-6, Attachment 1 at 4. The Consumer Advocate and the DOD did not propose any adjustment.

185. SmartSignal Expense Update. In its June 2007 Update Supplement (July 25, 2007), HECO T-6, page 2, HECO removed $299,000 of normalized SmartSignal expense and included $97,000 in equipment condition monitoring ("ECM") expense for a net decrease of $202,000 of production maintenance non-labor expense. See the response to DOD-IR-121 for a detailed explanation of this proposed reduction and the June 2007 Update Supplement (July 25, 2007), HECO T-6, Attachment 1, page 5. The Consumer Advocate and the DOD did not propose any adjustment.

186. Production O&M Labor Adjustment. In CA-T-1 (CA-101, Schedule C-4), the Consumer Advocate proposed a $953,000 reduction to production O&M labor expense but stated its willingness to consider equitable revisions to its labor adjustment for the maintenance accounts if HECO could show clear evidence that it requires additional supplemental labor to meet normal, on-going maintenance requirements because of the Company's inability to fill vacant positions in the Maintenance Division. During settlement negotiations, HECO provided additional information to address the Consumer Advocate's stated concern. After considering the supplemental maintenance labor cost information provided by the Company and the adjustments proposed for deferred station maintenance as described below, the Consumer Advocate accepted the Company's position that no adjustment to HECO's production O&M labor expense is required. See August 2007 Supplement, HECO T-6, Attachment 3. See also Stipulated Settlement Letter, Exhibit 1 at 5-6.

187. Deferred Station Maintenance List Projects Adjustment. In CA-T-1 (CA-101, Schedule C-5) the Consumer Advocate proposed a $1,813,000 reduction to production O&M expense to eliminate the costs associated with certain lower priority power station maintenance projects that were included in HECO's test year forecast. The proposed adjustment was based on HECO's responses to CA-IR-240, 241, and 242 that certain projects on the Kahe Station, Waiau Station and Honolulu Station priority lists would not be done in 2007. During the settlement discussions, HECO opposed the adjustment, and provided additional information on unbudgeted priority list items that have been or will be done in 2007. After reviewing the material, the Consumer Advocate continued to assert that its proposed adjustment was reasonable, citing the Company's discretion to proceed with station maintenance work, actual spending through July 2007, and the Consumer Advocate's reconsideration of its production O&M labor expense adjustment as discussed above. As part of the overall settlement of the issues impacting the test year revenue requirements, the Company accepted the Consumer Advocate's $1,813,000 adjustment to reduce the deferred station maintenance expense estimate for the 2007 test year. See Stipulated Settlement Letter, Exhibit 1 at 6.

188. Production Department Research and Development Adjustment. In CA-101, Schedule C-8, the Consumer Advocate: (1) removed funding of $221,000 for the Electronic Shock Absorber ("ESA") from the test year expense estimate based upon the uncertain status of future activities and costs related to this project, and (2) reduced the budgeted amounts for the other research and development ("R&D") spending initiatives (which it assumed was $754,000[17]) by one third, offset by HECO's actual spending through April 2007 ($30,656), to

[17] $754,000 + $221,000 = $975,000, not $935,000 as proposed by HECO. Based on HECO-629, the Consumer Advocate assumed that $40,000 for Sun Power for Schools expenses were included in the test year estimate. However, the 2007 budget (and, thus, the 2007 test year estimate) also includes a $40,000 credit, so that the net amount included in the test year was zero. See HECO response to

recognize that one third of the year has passed with very little activity or spending to-date, and the apparent uncertainties and potential delays in actual activities and expenditures. The net effect was to reduce the $935,000 amount proposed by HECO by $442,000 resulting in a test year expense estimate of $493,000. Upon consideration of the additional information provided by HECO during the settlement discussions describing HECO's additional funding commitments, the Consumer Advocate indicated its willingness to reduce the CA-101, Schedule C-8 adjustment of $442,000 to a revised reduction of $225,000. See August 2007 Supplement, HECO T-6, Attachment 5. For purposes of settlement, the Company accepted the Consumer Advocate's compromised $225,000 adjustment,[18] which reduced HECO's test year production R&D expense estimate to $710,000.[19] See Stipulated Settlement Letter, Exhibit 1 at 6-7.

189. Expiring Software Amortization. In direct testimony (HECO T-13, pages 18-20, and HECO-1304, page 9), HECO proposed to include $108,000, which represents the amortization through September 2007 of prepaid software expense that was paid to MINCOM, HECO's Ellipse software vendor. See Supplemental Information, HECO T-13, Attachment 3 hereto. As noted in CA-T-3, pages 70-71, the amortization period for this expense was reflected in the Stipulated Settlement Letter accepted by the Commission for purposes of Interim D&O 22050 in HECO's 2005 test year rate case. Although this software amortization would be recorded for nine months in 2007, the Consumer Advocate proposed that the $108,000 of

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CA-IR-80. If the inclusion of the $40,000 is backed out of the Consumer Advocate's proposed adjustment, the Consumer Advocate's adjustment would be reduced from ($442,000) to ($428,000).

[18] The Consumer Advocate's compromise adjustment was based on an allowance of $25,000 for disposal of damaged equipment for the ESA, taking into account the range of disposal costs estimated by HECO, and $36,000 for recurring renewable energy funds, taking into account actual expenditures through July 2007 and anticipated Hawaii Natural Energy Institute ("HNEI") billings. (The $225,000 revised reduction is equal to the following: ESA expense of $221,000 less allowed $25,000 = $196,000 disallowed; and recurring renewable energy funds expense of $65,000 less allowed $36,000 = $29,000 disallowed.)

[19] $935,000 minus $225,000 equals $710,000.

amortization be eliminated from the test year revenue requirement, noting that the amortization would not continue beyond September 2007 and is thus a "non-recurring" expense. As shown on CA-101, Schedule C, page 3, Adjustment C-15, the Consumer Advocate allocated the $108,000 adjustment as follows:

Production	$ 6,000
Transmission	$ 3,000
Distribution	$ 11,000
Administrative and General	$ 88,000
Total	$108,000

For purposes of settlement, the Company accepted the Consumer Advocate's adjustment and removed the MINCOM amortization expenses from HECO's test year expense estimates for the above accounts. See Stipulated Settlement Letter, Exhibit 1 at 7.

190. Abandoned Projects Normalization Adjustment. In direct testimony (HECO T-10, pages 55-56), HECO proposed to include an estimate of $224,000 for abandoned project costs in the test year revenue requirement. In CA-T-3, pages 72-78, (CA-101, Schedule C-19), the Consumer Advocate proposed a $122,000 adjustment to reflect an average of the actual abandoned projects costs for 2001 through 2006, without escalating the costs to 2007 dollars, and excluded the costs related to the Barbers Point NAS privatization costs. As noted on CA-101, Schedule C, page 4, Adjustment C-19, the Consumer Advocate allocated its proposed $122,000 adjustment to reduce HECO's test year estimates as follows:

Production	$ 9,000
Transmission	$ 3,000
Distribution	$104,000
Customer Accounts	$ 7,000
Administrative and General	($ 2,000)
Total	$122,000

The DOD did not propose any adjustment in this area. As a result of the settlement discussion, the Consumer Advocate agreed to reduce its total abandoned projects normalization adjustment from $122,000 to $94,000. This reflects the actual abandonment write-off in 2005 of $130,000 (HECO's estimate in direct testimony of $224,000 minus the Consumer Advocate's adjustment of $94,000). Using the distribution between functional accounts provided in the Stipulated Settlement Letter, Exhibit 1, HECO T-10, Attachment 1, the Consumer Advocate's revised abandoned project cost adjustment of $94,000 was allocated as follows:

Production	$ 18,000
Transmission	$ 10,000
Distribution	$ 51,000
Customer Accounts	$ 13,000
Administrative and General	$ 2,000
Total	$ 94,000

For purposes of settlement, the Company accepted the Consumer Advocate's revised adjustment and allocation as specified above. See Stipulated Settlement Letter, Exhibit 1, at 7-8.

191. Security Services Expense Adjustment. In DOD T-1 (DOD-116), the DOD proposed to reduce the Company's security services expense by $117,000. The DOD's adjustment was based on HECO's security services expense through June 2007, which the DOD annualized and deducted from HECO's test year estimate. The Company provided additional information in support of its position that the funds for annual security services, as originally estimated at $730,280, are expected to be spent in 2007, and proposed that no adjustment be made. See August 2007 Supplement, HECO T-6, Attachment 1 (DOD). For settlement purposes, the DOD agreed to no adjustment to HECO's security services expense. See Stipulated Settlement Letter, Exhibit 1 at 8.

192. As a result of the settlement reached on the issues described above and specified below, the Parties agreed to reduce HECO's June 2007 Update, Supplement (July 25, 2007), HECO T-6, Attachment 1, page 1, estimate of $70,077,000 by $2,479,000, resulting in revised test year production O&M expenses of $67,598,000. (The $2,479,000 is the sum of the

following adjustments: $175,000 (Environmental 316(b)), $243,000 (Generation Bidding), $1,813,000 (Deferred Station Maintenance), $225,000 (R&D), $6,000 (Expiring Software), and $18,000 (Abandoned Projects). The $1,000 difference is due to rounding.)

b.

Transmission and Distribution O&M Expenses

193. Test year transmission O&M expenses were estimated to be $10,491,000 in direct testimony (HECO T-7, page 4 and HECO-702), which was decreased by a net $113,000 to an updated total of $10,378,000 in the Company's June 2007 Update (June 29, 2007), HECO T-7, Attachment 1. Test year distribution O&M expenses were estimated to be $24,722,000 in direct testimony (HECO T-7, page 4, and HECO-702), which was increased by a net $226,000 to an updated total of $24,948,000 in the Company's June 2007 Update (June 29, 2007), HECO T-7, Attachment 1. The result is a test year estimate of $35,326,000 for transmission and distribution ("T&D") expenses. See June 2007 Update (June 29, 2007), HECO T-7, Attachment 1. After reviewing the adjustments proposed by HECO in the June 2007 Update (June 29, 2007), HECO T-7, the Consumer Advocate proposed adjustments amounting to $509,000 resulting in a test year T&D estimate of $34,817,000, consisting of $10,258,000 and $24,559,000 for transmission and distribution, respectively (CA-101, Schedule C, page 1). The $509,000 adjustment proposed by the Consumer Advocate consisted of the following: $388,000 to reduce T&D O&M labor expenses (see paragraph 203 below and CA-101, Schedule C-13), $14,000 to remove the expiring MINCOM amortization (see paragraph 204 below and CA-101, Schedule C-15) and $107,000 to normalize the abandoned projects expense estimate (see paragraph 205 below and CA-101, Schedule C-19) which are discussed below. The DOD did not propose any

adjustment to T&D O&M expenses. The positions of the Parties are summarized in the following table:

	HECO Direct	HECO June 2007 Update	CA Position (CA-101, Schedule C, page 1)	DOD Position (DOD-104)
Transmission	$10,491,000	$10,378,000	$10,258,000	$10,378,000
Distribution	$24,722,000	$24,948,000	$24,559,000	$24,948,000
Total	$35,213,000	$35,326,000	$34,817,000	$35,326,000
T&D Inventory (HECO-1703)	$6,160,000		$6,160,000	$6,160,000

194. Engineering Retention Program Labor Expense. In the June 2007 Update (June 29, 2007), HECO T-7, pages 1-2, and HECO T-7, Attachment 2, transmission O&M labor expense was increased by $9,600 and distribution O&M labor expense was increased by $40,200 for the Engineering Retention Program. The Engineering Retention Program was approved after the 2007 Budget was prepared and resulted in permanent increases to Engineers' salaries. See responses to CA-IR-69 and CA-IR-297 and the June 2007 Update (June 27, 2007), HECO T-10, Attachment 2 at 1. The Consumer Advocate and the DOD did not propose any adjustment.

195. Removal of the Vice President – Special Project Labor Expenses. In its June 2007 Update (June 29, 2007), HECO T-7, page 2, the Company decreased its transmission operation labor expense by $107,162 to reflect the retirement of the Vice President- Special Projects. The Consumer Advocate and the DOD did not propose any adjustment.

196. Ho'okina Award Non-Labor Expenses Adjustment. In its June 2007 Update (June 29, 2007), HECO T-7, pages 2-3, the Company removed $16,000 in transmission operation non-labor expense and $44,000 in distribution operation non-labor expense for the Ho'okina volunteer award recognition program which was suspended. See HECO-WP-101(G) at 909 and

924, HECO-1220; and June 2007 Update (June 29, 2007), HECO T-7, Attachment 2. The Consumer Advocate and the DOD did not propose any adjustment.

197. Increase to OMS Training Material Development. In its June 2007 Update (June 29, 2007), HECO T-7, page 3, the Company's consulting services expense for its Outage Management System ("OMS") increased from $31,992 to $72,765, or an increase of $40,773. This increase is primarily due to an increase in the amount of training to provide a seamless transition from HECO's current outage management process based on paper maps and trouble tickets to a more technologically advanced and sophisticated new OMS. The Consumer Advocate and the DOD did not propose any adjustment.

198. Reduction in the OMS Amortization Non-Labor Expenses. In the June 2007 Update (June 29, 2007), HECO T-7, pages 4-5, the amortization of the OMS software development costs included in distribution operation non-labor expense was decreased by $99,352, from $257,814 to $158,462 in the test year. The estimate was reduced due to delays in the implementation of the OMS project as discussed in the response to CA-IR-108 and HECO's June 21, 2007 letter to the Commission in Docket No. 04-0131. See also June 2007 Update (June 29, 2007), HECO T-7, Attachment 2 and June 2007 Update (June 27, 2007), HECO T-10 at 5-6. The Consumer Advocate and the DOD did not propose any adjustment.

199. Removal of duplicate OMS Software Maintenance Non-Labor Expense. In the June 2007 Update (June 29, 2007), HECO T-7, page 5, distribution operation non-labor expense was reduced by $77,139 for the duplicate OMS software maintenance expense budgeted in the test year. The Consumer Advocate and the DOD did not propose any adjustment.

200. Increase to OMS Software Maintenance Fees. In the June 2007 Update (June 29, 2007), HECO T-7, page 5, distribution operation non-labor expense was increased by $55,933 to

reflect the latest updated OMS project cost estimate for software maintenance expenses from $81,510 to $137,443 for the test year. The Consumer Advocate and the DOD did not propose any adjustment.

201. Increase to OMS Data Conversion Costs. In the June 2007 Update (June 29, 2007), HECO T-7, page 6, the Company increased the distribution operation non-labor expense by $262,934, from $30,000 to $292,934 to reflect higher than forecasted OMS data conversion costs. The estimate for this task was revised due to the change in the Geospatial Information System, which caused changes to the OMS extractor and required additional clean-up tasks. See HECO-WP-101(G) at 922, HECO's June 21, 2007 letter to the Commission in Docket No. 04-0131, and June 2007 Update (June 29, 2007), HECO T-7, Attachment 2. The Consumer Advocate and the DOD did not propose any adjustment.

202. Ocean Pointe AMI Lease Non-Labor Expense. In the June 2007 Update (June 29, 2007), HECO T-7, page 6, the distribution operation non-labor expense was increased by $47,100 for the cost to lease the Manu Kapu tower antenna site to provide the coverage area to communicate with HECO's AMI meters. The cost of leasing the Manu Kapu tower antenna was not included in HECO's 2007 budget. See June 2007 Update (June 29, 2007), HECO T-7, Attachment 2. The Consumer Advocate and the DOD did not propose any adjustment.

203. T&D Payroll Expense Adjustment. In CA-T-3, pages 54-66, (CA-101, Schedule C-13), the Consumer Advocate proposed a T&D O&M labor expense adjustment of $388,000 to reduce HECO's test year expense estimate for 14 employee positions. The proposed adjustment was based on the beginning of test year actual T&D Employees (December 31, 2006) and HECO's end of year estimate (December 31, 2007) of T&D employee levels. During the settlement discussions, the Company provided information regarding the hiring of employees

and unbudgeted temporary hires in January of the test year and proposed a lower T&D labor expense adjustment. After reviewing the information the Consumer Advocate agreed to revise its adjustment to reflect the compensation for 11 employees (versus the 14 upon which the Consumer Advocate based its $388,000 adjustment). The result is a revised adjustment of $316,000. The adjustment reduces HECO's 2007 Update estimates by $93,000 and $223,000 for transmission and distribution O&M labor, respectively. See Stipulated Settlement Letter, Exhibit 1, HECO T-14, Attachment 1(B). For purposes of settlement, HECO agreed to accept the Consumer Advocate's revised adjustment.

204. Expiring Software Amortization. As previously explained in the expiring software amortization discussion in Other Production O&M Expenses, in CA-101, Schedule C, page 3, adjustment C-15, the Consumer Advocate proposed reductions of $3,000 and $11,000 to transmission O&M non-labor expenses and distribution O&M non-labor expenses, respectively, to eliminate the MINCOM amortization fee which will terminate in September 2007. For purposes of settlement, the Company accepted the Consumer Advocate's adjustments.

205. Abandoned Projects Normalization Adjustment. As previously explained in the abandoned projects normalization adjustment discussion in Other Production O&M Expenses, in CA-101, Schedule C, page 4, adjustment C-19, the Consumer Advocate proposed reductions of $3,000 and $104,000 to transmission O&M and distribution O&M non-labor expenses, respectively for abandoned projects. As a result of the settlement discussions, the Parties agreed to reflect a revised reduction of $10,000 and $51,000 to the transmission and distribution expense estimates, respectively.

206. As a result of the settlement reached on the issues described above, the Parties agreed on a reduction of $391,000 (sum of $316,000 payroll adjustment, $14,000 expiring

software amortization and $61,000 abandoned projects normalization) to HECO's June 2007 Update (June 29, 2007), HECO T-7, resulting in a revised test year estimate of $10,272,000 for transmission O&M expenses and $24,663,000 for distribution O&M expenses. In addition, all Parties agreed to the Company's T&D inventory of $6,160,000 as presented in direct testimony. See HECO-1703. See also Stipulated Settlement Letter, Exhibit 1 at 9.

3.

Customer Accounts Expenses, Allowance for Uncollectibles, and Customer Service Expense

a.

Customer Accounts

207. Customer Accounts expenses are primarily related to providing, managing and maintaining services and information for customer account services and customer account management. See HECO T-8 at 3.

208. HECO's 2007 test year customer accounts expenses, excluding allowance for uncollectible accounts, were estimated at $12,020,000 in HECO's direct testimony. See HECO T-8, pages 2- 3, and HECO-801, page 1. The Company's test year estimate decreased to $11,929,000 in the June 2007 Update (June 29, 2007), HECO T-8, page 9 (updating HECO-801, page 1), which reflected a reduction for Customer Records and Collections of $91,000. In the response to CA-IR-428.d, HECO proposed a further reduction of $66,900 for non-labor expenses for temporary services. The result is a revised test year estimate of $11,862,100. In its direct testimony, the Consumer Advocate recommended a test year customer account expense estimate of $11,729,000 (CA-101, Schedule C, page 1) resulting in a difference of $133,100 from HECO's revised test year estimate of $11,862,100. The differences are described below.

209. Customer records and collections. The Consumer Advocate reflected an adjustment of $88,000 (CA-101, Schedule C, page 2 and CA-101, Schedule C-1[20]) to reduce the Company's direct testimony estimate, as opposed to the $91,000 proposed in HECO's June 2007 update, resulting in a $3,000 difference.

210. Temporary services. In addition, the Consumer Advocate proposed an adjustment of $85,986 (rounded to $86,000) to reduce expenses for temporary services (CA-101, Schedule C-9, line 7), which is $19,086 (rounded to $19,100) more than the $66,900 reduction proposed by HECO in its response to CA-IR-428.d.

211. Bank of Hawaii fees. The Consumer Advocate also proposed an adjustment to exclude $110,000 for Bank of Hawaii fees. See CA-101, Schedule C-9, line 11.

212. Abandoned project costs. The Consumer Advocate proposed a $7,000 adjustment to normalize the abandoned project costs included in the test year revenue requirement, as discussed in paragraph 190, above. See CA-101, Schedule C, page 4, adjustment C-19.

213. The DOD did not propose any adjustments for customer accounts.

214. For purposes of settlement, HECO accepted the Consumer Advocate's adjustments for temporary services and Bank of Hawaii fees and reflected the Company's June 2007 Update revision (i.e., the $91,000 for customer records and collections). In addition, as explained above, the differences regarding the adjustment to normalize the test year abandoned project costs were resolved (i.e. adjustment of $13,000 instead of $7,000). See above discussion regarding abandoned project costs. As a result, the Parties agreed on a test year estimate of $11,720,000 for customer accounts expense, excluding the allowance for uncollectible accounts. See Stipulated Settlement Letter, Exhibit 1 at 10.

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[20]$88,000 is equal to the sum of lines 18 and 19 in the "Adjustment Amount" column in Schedule C-1 of CA-101.

b.

Allowance for Uncollectible Accounts

215. In direct testimony, HECO presented three 2007 test year estimates of uncollectibles expense as shown in HECO-801 and HECO-805: $1,358,000, at present rates; $1,411,000, at current effective rates; and $1,511,000 at proposed rates. See HECO T-8, page 13.

216. In the June 2007 Update (June 29, 2007), T-8, HECO revised its estimates for uncollectible accounts expense due to updated revenue projections for the 2007 test year. The uncollectibles factor was not changed. The estimates of uncollectible accounts expense increased by $3,000 from $1,358,000 to $1,361,000, at present rates and $2,000 from $1,411,000 to $1,413,000, at current effective rates. See June 2007 Update (June 29, 2007) HECO T-8, page 7 (updating HECO-805).

217. The Consumer Advocate disagreed with HECO's methodology for calculating the uncollectible accounts expense based on a percentage of electric sales revenues. The Consumer Advocate proposed an uncollectible accounts expense of $727,420 (CA-101, Schedule C-9, line 18) based on the average of the actual 12-month cumulative net write-off as of December 2002, December 2003, December 2004, December 2005 and December 2006. The allowance for uncollectible accounts was not an issue in the DOD's testimony.

218. During the settlement discussions, HECO proposed an allowance for uncollectible accounts expense of $970,000. The $970,000 was calculated by HECO using five years of data (from July 2002 to June 2007, instead of the 10 years of data used in direct testimony) to calculate an estimated net write-off percentage for the test year of .0719% (Stipulated Settlement

Letter, Exhibit 1, HECO T-8, Attachment 1), which was applied to revenues at present rates ($1,348,635,000 x .0719% = $970,000).

219. The Parties could not reach agreement on the method of calculating the test year uncollectible accounts expense. For purposes of settlement, however, the Parties agreed to reflect $970,000 as a fixed uncollectible accounts dollar expense amount, with no further adjustment for assumed increases in uncollectibles associated with interim rate increases or the proposed revenues arising from the present docket. See Stipulated Settlement Letter, Exhibit 1 at 11.

c.

Customer Service Expense

220. HECO's 2007 test year customer service expenses were estimated to be $7,176,000 in direct testimony, HECO T-9, page 1, and HECO-901, which was increased by a net $94,000 to an updated total of $7,270,000 in the Company's June 2007 Update (June 15, 2007), HECO T-9, pages 1 and 3.

221. The Consumer Advocate recommended a test year expense estimate of $5,594,000, resulting in a reduction of $1,676,000 to the Company's June 2007 Update estimate. The adjustments proposed by the Consumer Advocate include $101,000 (CA-101, Schedule C-10) for payroll expense, $641,000 (CA-101, Schedule C-11) for reclassification of DSM expenses, and $934,000 (CA-101, Schedule C-12) for informational advertising. These adjustments are discussed below in paragraphs 222 through 224. The DOD proposed no adjustments in this area.

222. Payroll Expense Adjustment. In CA-T-1, the Consumer Advocate proposed a Customer Service labor expense reduction adjustment of $101,000. See CA-101, Schedule C-10.

The proposed adjustment was based on the same average staffing methodology and rationale proposed for the T&D labor expense adjustment. During the settlement discussions, the Company provided information regarding specific positions that were filled in January of the 2007 test year. As a result, the Company proposed a lower adjustment, which was partially accepted by the Consumer Advocate. The accepted changes in the calculation of average employees decreased the Consumer Advocate's recommended expense reduction of employees from 2.5 to 2.0. For purposes of settlement, the Parties agreed to a labor expense reduction of $85,000. See Stipulated Settlement Letter, Exhibit 1, HECO T-14, Attachment 1(A).

223. DSM Program Expense Adjustment. As presented in HECO's direct testimony, total test year DSM expenses were $3,002,000, of which $2,232,000 were attributed to DSM program costs and $770,000 were attributed to other DSM expenses as shown in HECO-903. See HECO T-9, page 39.

a. In CA-T-1, the Consumer Advocate proposed a customer service expense adjustment of $641,000 (CA-101, Schedule C-11) to remove the test year proposed level of DSM program costs, other than the Commercial and Industrial Demand Load Control ("CIDLC") and Residential Demand Load Control ("RDLC") programs, from base rates and to recover such costs through the Integrated Resource Planning ("IRP") cost recovery provision ("DSM Surcharge"), effective with the implementation of new base rates for HECO in this docket. The Company agreed with the Consumer Advocate's proposed recommendation to reclassify certain DSM labor costs to the DSM Surcharge, but proposed a smaller adjustment.

b. For purposes of settlement, HECO and the Consumer Advocate agreed to an adjustment of $543,000, which includes $361,000 in labor and $182,000 of on costs as shown in the Stipulated Settlement Letter, Exhibit 1, HECO T-9, Attachment 8. The $182,000 of on costs include $120,000 of employee benefits (Stipulated Settlement Letter, Exhibit 1, HECO T-9, Attachment 8, Column "Emp Ben", Row 32, and paragraph 234, below, Employee Benefits), $36,000 of corporate administrative expenses (Stipulated Settlement Letter, Exhibit 1, HECO T-9, Attachment 8, Column "Corp Adm", Row 32, and paragraph 241, below, Corporate Administration), and $26,000 of payroll taxes (Settlement Letter, Exhibit 1, HECO T-9, Attachment 8, Column "PR taxes", Row 32, and paragraph 245, below, Payroll Taxes). These costs will need to be recovered prospectively through the DSM Surcharge effective with the implementation of new rates in this docket and continuing through the transition of the DSM programs to a Third Party Administrator (Non-Utility Market Structure) as ordered in Decision and Order No. 23258 in Docket No. 05-0069. On September 26, 2007, the Commission issued Order No. 23681 in Docket No. 2007-0323 to initiate an investigative proceeding to select a Public Benefits Fund Administrator and to refine the details of the new Non-Utility Market Structure. On July 2, 2008, the Commission issued an Order to Initiate the Collection of Funds for the Third Party Administrator of Energy Efficiency Programs in Docket No. 2007-0323, which among other things ordered that the HECO Companies shall continue to operate all DSM programs through June 30, 2009 and shall assist the Third Party Administrator during the transition period. The Consumer Advocate understands that transition issues may be encountered that will impact the timing of the actual HECO labor cost reductions arising with third party administration. The difficulty in predicting future needs for HECO assistance during transition is why the Consumer Advocate believes that surcharge recovery is important at this time, to provide flexibility and more precise regulatory accounting and recovery of actual costs that are expected to change in the future. See Stipulated Settlement Letter, Exhibit 1, page 12. The DOD has not proposed any adjustments in this area.

c. In the June 2007 Update for HECO T-9, HECO increased labor cost by $75,000 associated with the addition of two regular HECO employees (CEP Analyst and C&I Engineer) into base rates. See June 2007 Update (June 15, 2007), HECO T-9, pages 1 and 3. Inclusion of these employees in base rates was based on Decision and Order No. 23258 in Docket No. 05-0069, issued February 13, 2007, pages 51 and 144, which states, "…labor costs shall be recovered through base rates and all other DSM-related utility-incurred costs shall be recovered through a surcharge." The Consumer Advocate proposed that the labor expenses for these two employees be reclassified to be recovered through the DSM surcharge. The Company accepted the Consumer Advocate's recommendation for purposes of settlement and has reclassified the labor associated with these two employees to be recovered through the IRP Clause as discussed above. The DOD has not proposed any adjustments to the Company's proposal.

224. Informational Advertising Expense. In CA-T-1, the Consumer Advocate proposed a reduction in test year informational advertising of $934,000. See CA-101, Schedule C-12. The Consumer Advocate contends that such increased advertising spending has not been proven to be necessary or cost-effective. The DOD did not propose any adjustment in this area. As part of the overall settlement on revenue requirements, HECO has accepted the Consumer Advocate's recommendation.

225. Commercial & Industrial Direct Load Control ("CIDLC") Program. In the June 2007 Update (June 15, 2007), HECO T-9, page 1, HECO increased non-labor expense for the

CIDLC Program by $148,414. See also response to CA-IR-122, page 6. Changes are in tracking/evaluation (decrease of $35,509), advertising (increase of $57,222), and administrative/miscellaneous (increase of $126,701) expenses. The decrease in tracking and evaluation expense of $35,509 reflects the recognition that tracking and evaluation systems can incorporate existing data base software and take advantage of the capability of the load control software program to also track enrolled customers' participation during actual load control events. The increase in advertising cost of $57,222 is the result of the need to increase enrollment of program participants in the small and large business customer segments. The increase in administration and miscellaneous expenses of $126,701 results from the recognition that delivering the small business direct load control program element to that segment will require more resources than can be provided by HECO's base employees and will necessitate the involvement of third parties. See Response to CA-IR-122, page 3 and 4. The Consumer Advocate has not proposed any adjustment to the Company's proposal.

226. SolarSaver Pilot Program Costs. In the June 2007 Update, HECO T-9, page 1, HECO eliminated $129,500 in non-labor expenses associated with the SolarSaver Pilot Program. See also response to CA-IR-122, pages 4 and 6. The decrease in the test year base SolarSaver Pilot Program costs reflects the elimination of those costs from base expenses due to HECO's proposal in its SolarSaver Pilot Program filing, dated December 29, 2006, Docket No. 2006-0425, that any incremental costs to set up and implement the program be recovered through a SolarSaver Adjustment component of the existing IRP Clause. The Company stated that if the Commission did not approve the SolarSaver Adjustment mechanism, HECO would seek an alternative recovery mechanism, which may result in an increase in test year expense estimates. See response to CA-IR-122, page 4. However, on June 29, 2007, the Commission

issued Decision and Order No. 23531 in Docket No. 2006-0425, which authorized the Company to recover the incremental costs through a SolarSaver Adjustment. The Consumer Advocate has not proposed any adjustment to the Company's proposal.

4.

Administrative and General Expenses

227. Administrative and general ("A&G") expenses represent a diverse group of expenses under the National Association of Regulatory Utility Commissioners Uniform System of Accounts ("NARUC USOA"), which the Commission has directed HECO to follow. See HECO T-10, page 4. Test year A&G expenses were estimated to be $72,007,000 in direct testimony, HECO T-10, page 2, which were increased by a net of $3,779,000 to an updated total of $75,786,000 in the Company's June 2007 Update Supplement (July 23, 2007), HECO T-10, Attachment 1, page 3.

228. The Consumer Advocate recommended a test year expense estimate of $68,555,000 (CA-101, Schedule C, page 1), a reduction of $7,231,000 to the Company's June 2007 Update Supplement (July 23, 2007), HECO T-10 Attachment 1, page 3 estimate. The adjustments proposed by the Consumer Advocate include the following:

- $596,000 (CA-101, Schedule C-16 and C-17) for payroll expense,
- $330,000 (CA-101, Schedule C-20) for Public Affairs consultant and service and community process activities,
- $535,000 (CA-101, Schedule C-21) to normalize the costs for the Ellipse migration,
- $254,000 (CA-101, Schedule C-22) to reflect the employee benefits associated with the recommended labor adjustments proposed in CA-101, Schedules C-16 and C 17,
- $(2,000) (see discussion in paragraph 190 above and CA-101, Schedule C-19) to normalize the abandoned project costs,
- $375,000 (CA-101, Schedule C-14) to normalize the R&D expense,
- $88,000 (see discussion in paragraph 189 above and CA-101, Schedule C-15) to remove the expiring MINCOM amortization, and

- $5,055,000 (CA-101, Schedule C-18) to remove the amortization of the pension asset.

229. As a result of the settlement discussions, the Parties agreed to a revised administrative and general expense test year estimate of $69,187,000, which is $6,599,000 less than HECO's June 2007 Update Supplement (July 23, 2007), HECO T-10 estimate and reflects the settlement of these nine issues as described below, as well as the removal of corporate administration and employee benefits expenses (discussed below in paragraphs 241 and 234, respectively) associated with the reclassification of DSM program expenses for the six customer service employees removed from base rates (to be recovered through the IRP Clause). See paragraphs 221 and 223, above.

230. Payroll Expense Adjustments for A&G Accounts.

a. The Consumer Advocate initially proposed A&G labor expense adjustments of $596,000 (CA-101, Schedules C-16 and C-17) in CA-T-3, pages 54-66. The proposed adjustments were based on the same methodology and rationale for the proposed T&D payroll expense adjustment (CA-101, Schedule C-13) and were based on the average of the beginning of year actual A&G employees (December 31, 2006) and HECO's end of year forecast (December 31, 2007) employee levels.

b. During the settlement discussions, the Company stated and the Consumer Advocate agreed that the proposed $180,660 adjustment to reduce the labor expenses for Responsibility Area ("RA") PNP, Regulatory Affairs should not be included. Because the Company had already reflected an increase of staff positions occurring in the middle of the test year, test year labor expenses were estimated for a test year average employee count identical to that calculated by the Consumer Advocate. See June 2007 Update, (June 29, 2007), HECO T-14, page 3. As a result, no difference exists between the

Consumer Advocate's and HECO's estimates of average test year employee counts for RA "PNP" and the $180,660 labor expense adjustments proposed by the Consumer Advocate in C-16 is not required. See Stipulated Settlement Letter, Exhibit 1, HECO T-14, Attachment 1(C).

c. HECO also provided information regarding the positions that were filled in January of the test year by employees or HECO temporary employees and outside contractors for the other RAs. The Company proposed adjustments to reduce the adjustments proposed by the Consumer Advocate in CA-101, Schedules C-16 and C-17. Based on the information provided, the Consumer Advocate acknowledged the Company's claim that the average number of employees using the updated information decreased the Consumer Advocate's recommended reduction of employees in CA-101, Schedule C-16 from 14.5[21] to 7.0, and in CA-101, Schedule C-17 from 3.0[22] to 2.0, but did not concur with the other representations of the Company. For purposes of settlement, the Parties agreed to a total A&G labor reduction of $232,000 (as opposed to the $487,340 adjustment proposed by the Consumer Advocate in CA-101, Schedules C-16 and C-17). See Stipulated Settlement Letter, Exhibit 1, HECO T-14, Attachments 1(C) and 1(D).

231. Public Affairs. In direct testimony, HECO included in its test year estimate for expense element 501 (outside services general) for Administration & General Expense – Non-Labor (Account 921) costs of $660,000 for a Public Affairs consultant and various service

[21] The employee reduction amount of (14.5) is equal to the total "Difference" of (17.0) less the employee reductions associated with RAs PHB, PHF, PSM, PVM, and PIB of (2.5). The proposed reductions for RAs PHB, PHF, PSM, PVM, and PIB were reflected in CA-101, Schedules C-10 and C-13, and CA-WP-101-C4.

[22] The employee reduction amount of (3.0) is equal to the sum of the employee reductions for the RAs of PCA (1.0), PYF (1.0), and PVL (1.0) as noted on the schedule. Employee reductions for all of the other RAs noted in Schedule C-17 were proposed and reflected in CA-101, Schedules C-10, C-13, and C-16.

and community process activities. See HECO-WP-101(G), page 953. The Consumer Advocate (CA-101, Schedule C-20) and the DOD (DOD-117) recommended a downward adjustment of $330,000 or one-half of the Company's test year estimate. For purposes of settlement, the Parties agreed on the test year estimate of $570,000, reflecting a decrease of $90,000 for expense element 501 costs. (The $570,000 is the sum of the $330,000, which is one-half of the Company's estimate of $660,000, and the projected costs of $240,000 for the Company's two critical projects that are explained below.) As a condition to the Stipulated Settlement Letter, the Company provided the Consumer Advocate with documentation on January 31, 2008 showing that the additional $240,000 for Company's two critical projects (greenhouse gas emission research project and seabird mitigation measures) was actually spent in 2007 and that the Company's 2007 expenditures in this area were approximately $750,000[23], including the $240,000. See Supplemental Information, HECO T-10, Attachment 3, for further discussion on the Company's two critical projects.

232. Ellipse Migration. The Company's test year estimate for the non-labor Ellipse Unix migration costs increased from $509,000 (See HECO T-10, page 21) to $854,000 as presented in HECO's responses to CA-IR-392, CA-IR-438 and CA-IR-440, and reflected in the June 2007 Update Supplement (July 23, 2007) HECO T-10, page 1. The Consumer Advocate proposed to "normalize" the Ellipse Unix migration cost for 2007 over three years, resulting in a downward adjustment of $535,000. See CA-101, Schedule C-21. The DOD did not propose any adjustment in this area. For purposes of settlement, the Company agreed to reduce the Ellipse Unix migration costs included in the test year by $535,000 as proposed by the Consumer Advocate, resulting in a normalized test year estimate of $319,000 ($854,000 minus $535,000).

[23] The Company clarified with the Consumer Advocate that it expects to spend approximately $750,000 in 2007 in this area.

233. Combined Insurance Premium Absorbed Losses, Non-Labor Expenses and Labor and Related Expenses. The Consumer Advocate accepted the Company's estimate of insurance expenses submitted in the June 2007 Update (June 15, 2007), HECO T-11, of $9,739,000, including an adjustment of $81,000 in Account 925 (injuries and damages). The $81,000 reduction included an adjustment of $20,000 due to a change in the implementation schedule of the Human Resources ("HR") Suite project ($19,000 of the adjustment were reflected in direct testimony (HECO T-11, page 2) and an additional reduction of $1,000 was made in the June 2007 Update (June 15, 2007), HECO T-11, page 1). The remainder consisted of a decrease of $61,000 to reflect the normalized replacement cost for heat-resistant coveralls (June 2007 Update (June 15, 2007), HECO T-11, page 2).

234. Employee Benefits. HECO's test year estimate for employee benefit expenses (Account Nos. 926000 and 926010) is $27,636,000, as presented in direct testimony. See HECO-1201. The Company's estimated employee benefit expense for the test year was increased by $3,654,000 for an updated total of $31,290,000. See June 2007 Update Supplement (July 25, 2007), HECO T-12, Exhibit 1. In Exhibit CA-101, Schedule C-22, the Consumer Advocate proposed to reduce HECO's revised forecast of employee benefit expenses by $254,000 to reflect the employee count reduction proposals made for T&D, customer service, and other departments that charge to A&G accounts. Based on the Parties' agreement on the test year headcount reduction of 22, associated employee benefits are reduced by $103,000 in Account No. 926010, which were accepted by the Parties for purposes of settlement. See Stipulated Settlement Letter, Exhibit 1, HECO T-14, Attachment 1(E). In addition, HECO's estimate for employee benefits expenses is reduced by $120,000, to reflect the reclassification of DSM program expenses for the six customer service employees removed from base rates (to be

recovered through the IRP Clause) as discussed in paragraphs 221 and 223above. The Parties agreed to this reduction. See Stipulated Settlement Letter, Exhibit 1, HECO T-9, Attachment 8, Column "Emp Ben", Row 32.

235. Abandoned Project Costs. As previously explained in the abandoned projects normalization adjustment discussion in Other Production O&M Expenses, for purposes of settlement, the Parties agreed on the test year estimate for abandoned project costs of $130,000, as shown on the Stipulated Settlement Letter, Exhibit 1, HECO T-10, Attachment 1, which provides the allocation of abandoned costs by block of accounts.

236. Miscellaneous Administrative and General (A&G) Expenses. In HECO's direct testimony, the miscellaneous A&G accounts and the associated estimates totaling $7,487,000 for the test year 2007, were as follows:

Acct No.	Description	Test Yr 2007 Estimate
928	Regulatory Commission Expenses	$ 283,000
9301	Inst / Goodwill Advertising	30,000
9302	Miscellaneous General Expenses	3,315,000
931	Rent Expense	2,757,000
932	Maintenance of General Plant	1,102,000
	TOTAL	$ 7,487,000

See HECO T-13, page 2, and HECO-1301. In the Company's June 2007 Update (June 15, 2007), HECO T-13, page 5, the estimate was increased by a net $195,000 to an updated total of $7,682,000. The net increase in the June 2007 Update includes the following adjustments:

a. An adjustment of $37,000 to increase regulatory commission expenses related to consulting costs for Act 162 and a pension funding study. The sum of Act 162 consulting costs of $50,000 and the pension study cost of $60,000 was divided by an amortization period of 3 years. See June 2007 Update (June 15, 2007), HECO T-13, pages 1-2.

b. An adjustment of $24,000 for revised rental lease costs, as explained in CA-IR-299, that increased the estimate of rent expenses from $2,757,000 to $2,781,000. The adjustment was attributable to the reassignment of an office lease agreement previously held by Hawaiian Electric Industries, Inc. ("HEI") and an increase in rent allocation for training rooms, net of the termination of office leases with HEI and American Savings Bank ("ASB"). See June 2007 Update (June 15, 2007), HECO T-13, page 3.

c. A decrease of $38,000 to maintenance of general plant expense was reflected in the 2007 Update (June 15, 2007), HECO T-13, page 3, for a section of work on the Ward parking structure rooftop that was capitalized. This changed the Ward Parking Facility Improvement Projects total from a normalized level of $382,000 to $344,000. See responses to CA-IR-300 and CA-IR-378.

d. An adjustment of $1,000 to decrease community service activities expense for allocated costs associated with the elimination of the Vice President-Special Projects position was made. Response to CA-IR-1 (HECO T-13); June 2007 Update (June 29, 2007), HECO T-7; June 2007 Update (June 27, 2007), HECO T-10; and June 2007 Update (June 29, 2007), HECO T-14.

e. An adjustment for an additional $53,000 for research and development costs associated with the Electrical System Analysis project and an additional $120,000 for development and demonstration of new technology costs associated with the AMI project. See June 2007 Update (June 15, 2007), HECO T-13, page 2.

237. In direct testimony, the Consumer Advocate proposed adjustments of $375,000 (CA-101, Schedule C-14) for R&D and $88,000 (CA-101, Schedule C-14) for expiring

MINCOM software amortization expenses as above. The DOD also proposed adjustments of $375,000 (DOD T-1 at 47) to reduce R&D expenses and $61,000 (DOD-115, page 1) for Edison Electric Institute ("EEI") membership dues. The resolution of these three issues is discussed below.

a. Miscellaneous A&G Expenses – R&D. In the Company's direct testimony, HECO T-13, R&D expenses were estimated at $2,591,000 for Electric Power Research Institute ("EPRI") dues and multiple R&D projects[24]. As discussed above, this amount was increased by $173,000 to a total of $2,764,000 in the Company's June 2007 Update (June 15, 2007), HECO T-13, page 7 (revised HECO-1304).[25] Both the Consumer Advocate and DOD did not propose any adjustment to the EPRI dues of $1,608,000 in the test year. However, for the non-EPRI R&D project amount, the Consumer Advocate and the DOD proposed a "normalization" adjustment of $375,000 based on a three year average (including the test year) of R&D expenses. See CA-101, Schedule C-14 and DOD T-1, page 47. During the settlement discussions, the Company provided further information. HECO's August 2007 Supplement, HECO T-13, Attachment 1 supports its proposed non-EPRI R&D expense projection of $1,156,000 ($2,764,000 less $1,608,000). For purposes of settlement, the Company proposed a total reduction of $300,000 based on projected expenditures for R&D in 2007, for a revised total of $856,000 for non-EPRI R&D projects in the test year. See Stipulated Settlement Letter, Exhibit 1, HECO T-13, Attachment 2. The

[24] $2,591,000 is equal to the sum of "R&D" costs of $2,064,000 and "Develop & Demonstrate New Technology" costs of $527,000. See, HECO-1304, page 1.

[25] $2,764,000 is equal to the sum of "Research and Development" costs of $2,117,000 and "Develop and Demonstrate New Technology" costs of $647,000 shown on revised HECO-1304.

Company also agreed to provide the Consumer Advocate with copies of the co-funding agreement with EPRI and its co-matching check to support the biofuels crop study that the Hawaiian Agriculture Research Center would oversee. A copy of the co-funding agreement and the co-matching check is provided as Supplemental Information, HECO T-13, Attachment 4. Furthermore, the Company agreed to spend at least the amount of EPRI dues ($1,608,000) plus the non-EPRI R&D amount ($856,000) on a recurring annual basis. Based on the above, the Consumer Advocate and DOD accepted the Company's proposal.

b. Miscellaneous A&G Expenses – Expiring Software Amortization. As discussed above, the Parties' differences with respect to the inclusion of the MINCOM amortization have been settled. Based on the settlement, the Company agreed to remove the MINCOM amortization expenses allocated to Miscellaneous A&G expenses of $88,000. See Supplemental Information, HECO T-13, Attachment 3 hereto.

c. Miscellaneous A&G Expenses – EEI Membership Dues. The Company estimated EEI dues of $198,000 in direct testimony. See HECO T-13, pages 16-17, and HECO-1304, page 5. This estimate excluded a portion of the EEI dues that related to government lobbying, based on information provided by EEI on its 2006 invoices. DOD proposed an additional exclusion of $61,000, calculated on a larger exclusion percentage (DOD-115). This larger percentage was based on the amounts EEI spent on legislative and regulatory advocacy, advertising, marketing, and public relations activities in 2005. The proposed exclusion percentage was adopted by the Arkansas Public Service Commission in

Docket No.06-101-U. The Company did not accept the DOD's proposal but, for settlement purposes, agreed to exclude an additional $37,000, based on the percentage of EEI's 2006 expenditures for legislative advocacy, legislative policy research, advertising, marketing, and public relations. See Stipulated Settlement Letter, Exhibit 1, HECO T-13, Attachment 1, page 2. The DOD and Consumer Advocate accepted the Company's proposal.

238. As a result of the settlement discussions, all Parties agreed to a revised estimate of $7,239,000 for miscellaneous A&G expenses, which includes the settlement of these three issues as described above. See Stipulated Settlement Letter, Exhibit 1 at 16.

239. Pension Tracking Mechanism

a. As a result of the settlement reached between HELCO and the Consumer Advocate regarding the implementation of a pension tracking mechanism for HELCO in Docket No. 05-0315 (HELCO's 2006 test year rate case), HECO proposed a pension tracking mechanism in the instant proceeding. See June 2007 Update (June 27, 2007), HECO T-10, Attachment 8.

b. Although HECO and the Consumer Advocate agreed to the implementation of a pension tracking mechanism, the Consumer Advocate disagreed with HECO's proposal to include the amortization of the test year pension asset balance (an expense of $5,055,000) in test year revenue requirements. See CA-101, Schedule C-18. The DOD objected to the implementation of a pension tracking mechanism. See DOD T-1 at 53-55. Further, the DOD also objected to HECO's proposed inclusion of the amortization of the test year ending pension asset of $5,055,000 in test year revenue requirements. See DOD T-1 at 31-33 and DOD-114.

c. For purposes of settlement, the Parties agreed to a pension tracking mechanism that does not include the amortization of the pension asset as part of the pension tracking mechanism in this proceeding. Not including the amortization has the effect of deferring the issue of whether the pension asset should be amortized for ratemaking purposes to HECO's next rate case.[26] In addition, under the tracking mechanism, HECO would only be required to fund the minimum level required under the law, until the existing pension asset amount is reduced to zero, at which time the Company would fund the NPPC as specified in the pension tracking mechanism for HELCO.[27] If the existing pension asset amount is not reduced to zero by the next rate case, the Parties would address the funding requirements for the pension tracking mechanism in the next rate case.[28] Furthermore, the pension tracking mechanism will require the Company to create a regulatory asset or regulatory liability, as appropriate, for the difference between the amount of NPPC included in rates and the actual NPPC recorded by the Company. See Stipulated Settlement Letter, Exhibit 1, HECO T-10, Attachment 2, for the agreed upon pension tracking mechanism.

240. OPEB Tracking Mechanism. In this proceeding, HECO proposed an OPEB tracking mechanism. See June 2007 Update (June 27, 2007), HECO T-10, Attachment 9.

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[26] In order to simplify the issues in its 2009 test year rate case, HECO did not propose to include the pension asset in rate base, or include any amortization of the pension asset in determining its revenue requirements. Docket No. 2008-0083, HECO T-11 at 77.

[27] This provision is different from the tracking mechanism that was agreed to for the pending HELCO rate case due to different fact and circumstances. In the HELCO rate case, the Parties were in agreement as to the inclusion of the pension asset in rate base and the amortization of the pension asset balance at the end of the test year. In the current HECO rate case, the Parties disagree as to whether the pension asset should be included in the test year rate base, as well as whether said balance should be amortized for rate making purposes.

[28] Since the existing pension asset is not reduced to zero in the 2009 test year, HECO proposed in its 2009 test year rate case to continue the same funding requirements wherein HECO is required to fund the pension trust at the minimum required level under the law, until the pension asset is reduced to zero. Docket No. 2008-0083, HECO T-11 at 77.

HELCO and the Consumer Advocate previously agreed to the implementation of an OPEB tracking mechanism for HELCO in Docket No. 05-0315 (HELCO's 2006 test year rate case). The Consumer Advocate indicated that the OPEB tracker was a non-event in the HECO rate case. The DOD objected to the implementation of an OPEB tracking mechanism. For purposes of settlement, the Parties agreed to HECO's proposed OPEB tracking mechanism. The implementation of the OPEB tracking mechanism does not impact the test year revenue requirements in this case. See Stipulated Settlement Letter, Exhibit 1 at 18.

241. Corporate Administration. HECO's estimate of A&G expenses was reduced by $36,000 to remove the corporate administration expenses associated with the reclassification of DSM program expenses for the six customer service employees removed from base rates (to be recovered through the IRP Clause) as discussed in paragraphs 221 and 223, above. The Parties agreed to this reduction. See Stipulated Settlement Letter, Exhibit 1, HECO T-9, Attachment 8, Column "Corp Adm", Row 32.

5.

Depreciation and Amortization

242. The Company's test year estimate of depreciation expense submitted in direct testimony was $79,736,000. See HECO T-13, page 27. With the update of actual plant additions in 2006, including updates to the historical 5-year averages for retirements, cost of removal and salvage, test year depreciation expense was adjusted by $973,000 to $78,763,000. The updated test year accumulated depreciation end of year balance increased by $3,652,000 from $1,188,793,000 to $1,192,445,000 due to lower 2006 plant retirements of approximately $3,400,000 and updated averages with the inclusion of 2006 recorded data. See June 2007 Update (June 15, 2007), HECO T-13, pages 11-23 (updating HECO-1308 through 1311 and

HECO-WP-1301 through HECO-WP-1305). The Consumer Advocate and DOD accepted the Company's updated estimates. See Stipulated Settlement Letter, Exhibit 1 at 18.

6.

Taxes

a.

Taxes Other than Income Taxes

243. The taxes included in taxes other than income taxes are payroll taxes for: (1) the Federal Insurance Contribution Act and Medicare ("FICA/Medicare") tax, (2) the Federal Unemployment ("FUTA") tax, (3) the State Unemployment ("SUTA") tax, and revenue taxes consisting of (a) the State Public Service Company ("PSC") tax, (b) the State Public Utility ("PUC") fee, and (c) the County Franchise Royalty ("Franchise") tax. See HECO T-15, pages 1-2 and HECO-1501. HECO's 2007 test year estimates of taxes other than income taxes at present and current effective rates presented in direct testimony, and updated in the Company's June 2007 Update Supplement (July 25, 2007), HECO T-15, pages 3-4, are as follows:

Taxes Other Than Income Taxes

	At Present Rates Direct Testimony	At Present Rates June 2007 Update Supplement
PSC Tax	$79,354,000	$79, 483, 000
Public Utility Fee	6,742,000	6,753,000
Franchise Tax	33,626,000	33,682,000
Payroll Tax	6,429,000	6,366,000
Total	$126,151,000	$126,284,000

	At Current Effective Rates Direct Testimony	At Current Effective Rates June 2007 Update Supplement
PSC Tax	$82,408,000	$82,746, 000
Public Utility Fee	7,002,000	7,030,000
Franchise Tax	34,922,000	35,067,000
Payroll Tax	6,429,000	6,366,000
Total	$130,761,000	$131,209,000

See HECO-1501.

As shown on page 1 of Exhibit A of the Commission's June 20, 2008 *Order Granting Hawaiian Electric Company Inc.'s Motion to Adjust Interim Increase Filed on May 21, 2008* and pages 1 and 6 of Exhibit 1 of HECO's *Motion to Adjust Interim Increase*, the taxes other than income taxes were $130,706,000 at final rates approved in Docket No. 04-0113. Due to the increase in other operating revenues as a result of the final rates approved in the 2005 test year rate case and the resulting increase in revenue taxes, the September 30, 2008 Revenue Requirement Correction changed the test year taxes other than income taxes to $130,731,000 at final rates approved in Docket No. 04-0113. Revenue Requirement Correction, Exhibit 1 at 6.

244. Revenue Taxes. Schedule C, page 1, of CA-101 shows the Consumer Advocate's proposed operating income for the test year. It includes taxes other than income taxes of $126,401,000 in column D. In the settlement process, HECO noted that the Consumer Advocate's test year estimate of taxes other than income taxes was understated due to revenue tax expenses not being included for the 2005 test year rate case interim rate increase revenues (CA-101, Schedule C-2), and for only a portion of the interim surcharge revenues for DG fuel and trucking and LFSO trucking. The Consumer Advocate confirmed this error and the Parties agreed that a correction was needed to add revenue taxes for the entire $57,214,000 of the

interim rate increase and surcharge revenues, increasing the Consumer Advocate's test year revenue tax expenses at current effective rates by $4,928,000. Based on a revenue tax factor of 8.885%, revenue taxes on $57,241,000 are $5,086,000 or $4,927,000 more than the Consumer Advocate's $158,000 adjustment shown in CA-101, Schedule C, page 2, line 18, adjustment C-2. As explained above, HECO filed a Motion to Adjust Interim Increase and a Revenue Requirement Correction in this proceeding to ultimately adjust the taxes other than income taxes to $130,731,000 at final rates approved in Docket No. 04-0113 which included the change in revenue taxes.

245. Payroll Taxes. The Consumer Advocate and HECO have calculated a reduction to HECO's estimate of payroll taxes associated with the average test year employee labor expense reductions made for T&D, customer service, and other departments that charge to A&G accounts. Based on the estimated total test year average employee count reduction of 22, payroll taxes are reduced by $46,000. See Stipulated Settlement Letter, Exhibit 1, HECO T-14, Attachment 1(F). In addition, HECO's estimate of payroll taxes was reduced by $26,000, to reflect the reclassification of DSM program expenses for the six customer service employees removed from base rates (to be recovered through the IRP Clause) as discussed in paragraph 223 above. See Stipulated Settlement Letter, Exhibit 1, HECO T-14, Attachment 1(F). See also Stipulated Settlement Letter, Exhibit 1, HECO T-9, Attachment 8, Column "PR Taxes", Row 32. For settlement purposes, the Consumer Advocate and DOD accepted these adjustments.

b.

Income Taxes

246. In HECO's direct testimony (HECO T-15), under current effective rates, the 2007 test year income tax expense was $14,292,000. See HECO-1502 at 2. Under present rates,

HECO's 2007 test year income tax expense presented in direct testimony was ($4,107,000). See HECO-1502, page 1. Under proposed rates, the 2007 test year income tax expense was $49,559,000. See HECO-1502 at 2. The calculations of income taxes at current effective, present and proposed rates utilized a top composite rate of 38.9097744%. This rate assumes the top marginal federal income tax rate of 35% and a state income tax rate of 6.4%. This combined rate became effective as of January 1, 1993 after the Revenue Reconciliation Act of 1993. The calculations are shown on HECO-WP-1502, page 1.

247. The Company's estimate of income taxes for the test year was revised due to: a) revisions in the test year estimates of revenues and expenses at present, current effective, and proposed rates, b) revisions to the interest expense adjustment for changes in allowance for funds used during construction ("AFUDC"), c) a change in the domestic production activities deduction, and d) the addition of the tax effect of the preferred stock dividend deduction. As revised in HECO's June 2007 Update, under present rates, the 2007 test year income tax expense was ($6,634,000). As revised, under current effective rates, the 2007 test year income tax expense was $13,026,000. As revised, under proposed rates, the revised 2007 test year income tax expense was $47,501,000. See June 2007 Update Supplement (July 25, 2007), HECO T-15 at 1, 5 and 6.

248. As stated in the Stipulated Settlement Letter, the Parties agreed that the amount of the Interim Rate Increase to which HECO was probably entitled under §269-16(d) of the HRS was $69,997,000 over revenues at current effective rates (and $127,293,000 over revenues at present rates). On September 6, 2007, HECO filed its Statement of Probable Entitlement which provided the exhibits showing the results of operations reflecting the above amounts to which the Parties agreed HECO was probably entitled. Exhibit 1 at 1 and Exhibit 2 at 1 reflected the

following income tax amounts for the 2007 test year: $18,354,000 at current effective rates, ($1,960,000) at present rates and $43,177,000 at proposed rates

249. Interest Synchronization. Previous sections of this document discuss the interest synchronization issue at length. On May 1, 2008, the Commission issued the Final D&O in HECO's 2005 test year rate case which stated that the interest synchronization method for calculating interest expense should be adopted for that rate case. As a result, in HECO's Motion to Adjust Interim Increase (May 21, 2008), the Company incorporated the interest synchronization method in computing the interest expense deduction for purposes of calculating the income tax expense for the 2007 test year. This resulted in an interest expense of $30,475,000 (Motion to Adjust Interim Increase, Exhibit 1 at 12) and added $84,000 to the 2007 test year revenue requirement (Memorandum in Support of Motion to Adjust Interim Increase at 16-18), which adjusted the interim increase to $77,867,000 over revenues at the final rates implemented in Docket No. 04-0113.

250. As a result of the adjusted interim increase to which the Parties agreed and the Commission approved, the test year income tax amounts changed to the following amounts: $15,641,000 at final rates implemented in Docket No. 04-0113 and $43,254,000 at proposed rates. Motion to Adjust Interim Increase, Exhibit 1 at 1

251. As a result of the corrections to the 2007 test year other operating revenues based on the final rates approved in D&O 24171 in the HECO 2005 rate case as explained in paragraph 145 above, the September 30, 2008 Revenue Requirement Correction changed the test year income taxes at the final rates approved in Docket No. 04-0113 to $15,787,000 but did not alter income taxes at proposed rates ($43,254,000) as calculated in the Memorandum in Support of Motion to Adjust Interim Increase.

c.

Interest on Customer Deposits

252. In the June 2007 Update (June 29, 2007), HECO T-8, HECO updated the 2007 test year interest on customer deposits to reflect recorded actuals through December 2006. This increased the 2007 test year estimate by $2,000 from $375,000 to $377,000. See updated HECO-803 and HECO-WP-803, which are presented on pages 4 and 6, respectively, 2007 Update (June 29, 2007), HECO T-8. Interest on customer deposits was not an issue in the Consumer Advocate's testimony.

D.

Rate Base

1.

Introduction

253. HECO generally calculates the test year rate base in accordance with the concepts adopted by the Commission in prior rate case decisions, including D&O 24171 (dated May 1, 2008) in Docket No. 04-0113 ("HECO 2005 Decision"), HECO's 2005 test year rate case; Decision and Order No. 14412 (dated December 11, 1995) in Docket No. 7766 ("HECO 1995 Decision"), HECO's 1995 test year rate case; and Decision and Order No. 13704 (dated December 28, 1994) as amended by Order No. 13718 (dated January 5, 1995) in Docket No. 7700, HECO's 1994 test year rate case See HECO T-17, page 2.

254. The rate base is calculated as the sum of the average balances for the following investments in assets:

1) Net cost of plant in service,

2) Property held for future use,

3) Fuel inventory,

4) Materials and supplies inventories,

5) Unamortized net SFAS 109 regulatory asset,

6) Pension regulatory asset,

7) Unamortized SFAS 106 other postretirement benefits other than pensions ("OPEB") regulatory asset,

8) SFAS 158 OPEB regulatory asset,

9) Unamortized system development costs,

10) Unamortized dispatchable standby generation ("DSG") regulatory asset, and

11) Working cash.

less the sum of the average balances for the following funds from non-investors:

1) Unamortized contributions in aid of construction ("CIAC"),

2) Customer advances for construction,

3) Customer deposits,

4) Accumulated deferred income taxes,

5) Unamortized investment tax credits,

6) Unamortized gain on sales,

7) Pension liability, and

8) OPEB liability.

See HECO T-17, pages 2-3 and HECO-1701.

255. HECO's test year 2007 average rate base at proposed rates presented in direct testimony was estimated to be $1,214,313,000 as shown on HECO-1701. The components of rate base are summarized below ($ in thousands):

Investment in Assets Serving Customers	12/31/2006	12/31/2007	Average for 2007
Net Cost of Plant in Service	1,351,748	1,382,432	1,367,090
Property Held for Future Use	3,380	3,380	3,380
Fuel Inventory	52,706	52,706	52,706
Materials & Supplies Inventories	12,838	12,838	12,838
Unamortized Net SFAS 109 Regulatory Asset	53,207	56,049	54,628
Pension Regulatory Asset	157,466	164,909	161,188
Unamortized SFAS 106 OPEB Regulatory Asset	7,811	6,509	7,160
SFAS 158 OPEB Regulatory Asset	30,077	30,473	30,275
Unamortized System Development Costs	0	6,018	3,009
Unamortized DSG Regulatory Asset	0	645	323
Working Cash at Present Rates	24,122	24,122	24,122
Total Investments in Assets	1,693,355	1,740,081	1,716,718
Funds from Non-Investors			
Unamortized CIAC	166,612	168,486	167,549
Customer Advances	968	676	822
Customer Deposits	6,155	6,598	6,377
Accumulated Deferred Income Taxes	158,171	151,990	155,081
Unamortized ITC	28,984	30,875	29,930
Unamortized Gain on Sales	1,582	1,207	1,395
Pension Liability	89,206	114,678	101,942
OPEB Liability	37,888	36,982	37,435
Total Deductions	489,566	511,492	500,529
Average Rate Base at Present Rates			1,216,189
Change in Working Cash			(1,876)
Average Rate Base at Proposed Rates			1,214,313

NOTE: Totals may not add exactly due to rounding.

See HECO-1701.

256. This estimate was updated to $1,201,212,000, at proposed rates, in the June 2007 Update Supplement (July 25, 2007), HECO T-17, and the response to DOD-IR-96, page 2 (updating HECO-1701), based on updated rate base component amounts such as the replacement of 2006 year-end estimates with recorded amounts, inclusion of the asset retirement obligation ("ARO") regulatory asset, and changes to working cash. The components of rate base at proposed rates, as updated, are summarized below ($ in thousands):

Investment in Assets Serving Customers	12/31/2006	12/31/2007	Average for 2007
Net Cost of Plant in Service	1,331,363	1,370,649	1,351,006
Property Held for Future Use	517	3,567	2,042
Fuel Inventory	53,084	53,084	53,084
Materials & Supplies Inventories	12,838	12,838	12,838
Unamortized Net SFAS 109 Regulatory Asset	49,429	51,405	50,417
Pension Asset	68,260	50,549	59,405
OPEB Amount	0	0	0
Unamortized System Development Costs	0	4,642	2,321
Unamortized DSG Regulatory Asset	0	0	0
ARO Regulatory Asset	27	26	27
Working Cash at Present Rates	26,271	26,271	26,271
Total Investments in Assets	1,541,789	1,573,031	1,557,410

Funds from Non-Investors	12/31/2006	12/31/2007	Average for 2007
Unamortized CIAC	164,092	176,802	170,447
Customer Advances	1,001	756	879
Customer Deposits	6,369	6,827	6,598
Accumulated Deferred Income Taxes	152,438	139,685	146,062
Unamortized ITC	28,523	30,065	29,294
Unamortized Gain on Sales	1,582	1,214	1,398
Total Deductions	354,005	355,349	354,677
Average Rate Base at Present Rates			1,202,733
Change in Working Cash			(1,521)
Average Rate Base at Proposed Rates			1,201,212

NOTE: Totals may not add exactly due to rounding.

See June 2007 Update Supplement (July 25, 2007), HECO T-17, and HECO's response to DOD-IR-96, page 2, updating HECO-1701.

The Consumer Advocate and DOD accepted the Company's test year average rate base estimate except for three items: 1) inclusion of the pension asset and the related component of accumulated deferred income taxes ("ADIT") (CA-101, Schedule B-2); 2) the estimate of cash working capital (CA-101, Schedule B-3); and 3) an element of ADIT related to AFUDC in Construction Work in Progress ("CWIP") (CA-101, Schedule B-5). In addition, the Consumer Advocate did not accept the Company's fuel inventory estimate, based on slight differences in the results of its production simulation model with respect to the LSFO burn rate (CA-101, Schedule B-4). Based on these differences, the Consumer Advocate's estimate of the test year average rate base was $1,156,048,000 (CA-101, Schedule B) and DOD's estimate was $1,150,720,000 (DOD-103). For purposes of settlement, the Parties agreed to the cash working capital, the ADIT component related to CWIP and fuel inventories. (See Stipulated Settlement Letter, Exhibit 1, pages 21-22, 21, and 20, respectively.) As explained above, given the Commission's decision on the pension asset issue in Docket No. 04-0113, HECO will not pursue its proposal to include its pension asset in rate base in this proceeding (Docket No. 2006-0386) in order to eliminate this outstanding issue and facilitate conclusion of this proceeding.

257. Besides determining that the prepaid pension asset, adjusted by the related portion of the ADIT reserve, should be excluded from rate base, the Commission also determined that interest synchronization should be used to calculate interest expense in the 2005 test year in the HECO 2005 Decision. All Parties agreed that interest synchronization should be incorporated for purposes of calculating the interim adjustment for the 2007 test year. Due to adjustments that revised the estimate of working cash, the estimate of rate base at the final rates approved in Docket No. 04-0113 was calculated to be $1,159,090,000 and at proposed rates to be $1,158,315,000. See Memorandum in Support of Motion, Exhibit 1, page 3 (May 21, 2008). The Revenue Requirement Correction resulted in an immaterial change to rate base at final rates approved in Docket No. 04-0113 ($1,159,087,000) and did not change rate base at proposed rates. Revenue Requirement Correction, Exhibit 1 at 3.

2.

Additions to Rate Base

a.

Net Cost of Plant in Service

258. HECO's estimated average net cost of plant in service for the test year 2007 was $1,367,090,000, as presented in its direct testimony. See HECO T-17, page 3 and HECO-1702. In HECO's response to DOD-IR-96, page 2 (updating HECO-1701), the 2007 test year estimate of average net cost of plant in service for the test year 2007 was $1,351,006,000. The Consumer Advocate and the DOD accepted this updated estimated average net cost of plant in service. See Stipulated Settlement Letter, Exhibit 1 at 19.

b.

Property Held for Future Use

259. Property held for future use is property owned by HECO and held for future utility purposes. In direct testimony, HECO's 2007 test year estimate of the average property held for future use was $3,380,000 as shown on HECO-1701. See HECO T-17, page 5. In HECO's response to DOD-IR-96, page 2 (updating HECO-1701), the 2007 test year estimate of the average property held for future use was $ 2,042,000. The Consumer Advocate and the DOD accepted this updated estimate. See Stipulated Settlement Letter, Exhibit 1 at 19.

c.

Fuel Inventory

260. Test year fuel inventory was $52,706,000 in direct testimony (HECO T-4, page 2) and was updated to $53,084,000 in the June 2007 Update (June 15, 2007), HECO T-4, and response to CA-IR-214, page 18 (updating HECO-408). For purposes of settlement, the

Consumer Advocate and the DOD accepted HECO's average test year balance of $53,084,000 as shown in the June 2007 Update (June 29, 2007), HECO T-17, page 7, and in the response to DOD-IR-96, page 2 (updating HECO-1701). HECO's test year estimate was based on the updated production simulation results provided in response to CA-IR-214 and the June 2007 Update (June 15, 2007), HECO T-4.

d.

Materials and Supplies Inventories

261. The Parties agree with HECO's production inventory of $6,678,000 and T&D inventory of $6,160,000 and the Company's $12,838,000 average materials and supplies inventory as shown in HECO-1703 in direct testimony and in the response to DOD-IR-96, page 2 (updating HECO-1701).

e.

Unamortized Net SFAS 109 Regulatory Asset

262. The net regulatory asset is an accounting asset that came about due to the reporting requirements of SFAS 109. HECO's 2007 test year estimate of average net SFAS 109 regulatory asset was $54,628,000, as shown on HECO-1701. In HECO's response to DOD-IR-96, page 2 (updating HECO-1701), the 2007 test year estimate of average net SFAS 109 regulatory asset was $50,417,000. As explained in the accumulated deferred income tax section below, the Parties agreed to an adjustment that included an increase of $4,310,000 to the net SFAS 109 regulatory asset average test year balance. See Stipulated Settlement Letter, Exhibit 1, HECO T-15, Attachment 1. As a result, the 2007 average test year balance for the unamortized net SFAS 109 regulatory asset was $54,727,000. The Consumer Advocate and the DOD accepted this updated estimate. See Statement of Probable Entitlement, Exhibit 1 at 3.

f.

Pension Asset

263. HECO proposed an estimated average pension regulatory asset of $161,188,000 and an estimated average pension liability of $101,942,000 for the 2007 test year, as shown on HECO-1701. See HECO T-17, page 10. See also HECO T-10, page 73. HECO later revised its proposal to include $59,405,000 of pension asset in the test year average rate base. See June 2007 Update (June 29, 2007), HECO T-17, page 7 and response to DOD-IR-96, page 2 (updating HECO-1701) which also reflected the elimination of the remainder of the pension regulatory asset and entire pension liability. The portion of the ADIT related to the pension asset amounted to $23,114,000 (as calculated from responses to CA-IR-136 and CA-IR-441).[29] The Parties agreed that the exclusion of all or a portion of the pension asset in rate base will also require corresponding adjustment to ADIT. The Consumer Advocate and the DOD oppose the inclusion of HECO's pension asset in rate base in this proceeding. The Parties are unable to reach agreement on this issue. However, as explained above, given the Commission's decision on the pension asset issue in Docket No. 04-0113, HECO will not pursue its proposal to include its pension asset in rate base in this proceeding (Docket No. 2006-0386) in order to eliminate this outstanding issue and facilitate conclusion of this proceeding.

g.

OPEB Amount

264. The test year estimate of the average unamortized SFAS 106 OPEB regulatory asset presented in direct testimony is $7,160,000, as shown on HECO-1701. See HECO T-17, page 12. The test year estimate of the average SFAS 158 OPEB regulatory asset presented in

[29] $23,114,000 is the average of the 12/31/06 ADIT balance of $26,560,700 (response to CA-IR-136) and the 12/31/07 ADIT balance of $19,668,879 (response to CA-IR-441).

direct testimony is $30,275,000, as shown on HECO-1701. See HECO T-17, page 13. These two amounts are equal to the OPEB liability of $37,435,000, as shown on HECO-1701, which results in an impact of $0 on the rate base. See June 2007 Update (June 29, 2007), HECO T-17, page 7, which reflects the OPEB Amount at "0". The Consumer Advocate and the DOD accepted this amount. See Stipulated Settlement Letter, Exhibit 1 at 19. See also June 2007 Update, HECO T-10 at 7, Attachment 11.

265. As explained in the June 2007 Update (June 29, 2007), HECO T-17, page 4, the OPEB tracking mechanism requires HECO to make contributions to the OPEB plan equal to the NPPBC. Therefore, a payment lag of 85 days was calculated for OPEB expense and included in the updated calculation of the weighted average payment lag for O&M non-labor (June 2007 Update, HECO T-17, page 14). The payment lag of 85 days was also included in the calculation of working cash that was accepted by the Consumer Advocate and the DOD. See Stipulated Settlement Letter, Exhibit 1, HECO T-17, Attachment 1, page 1.

h.

Unamortized System Development Costs

266. The test year estimate of unamortized system development costs presented in direct testimony was $3,009,000, as shown on HECO-1701. See HECO T-17, page 14. The unamortized system development costs relate to the HR Suite project (Phase 1) discussed in HECO T-12 and the OMS project discussed in HECO T-7. The estimate of the average 2007 unamortized system development costs was revised to $2,321,000 in the June 2007 Update (June 29, 2007), HECO T-17, page 7. See also response to DOD-IR-96, page 2 (updating HECO-1701). The Consumer Advocate and the DOD accepted the revised estimate. See Stipulated Settlement Letter, Exhibit 1 at 19.

i.

Unamortized DSG Regulatory Asset

267. The test year estimate of the unamortized DSG regulatory asset presented in direct testimony was $323,000, as shown on HECO-1701. See HECO T-17, pages 15-16. The estimate was revised to zero in the June 2007 Update (June 29, 2007), HECO T-17, pages 7 and 9, due to the cancellation of the DSG project. See also response to DOD-IR-96, page 2 (updating HECO-1701). The Consumer Advocate and the DOD accepted the revised estimate. See Stipulated Settlement Letter, Exhibit 1 at 19.

j.

ARO Regulatory Asset

268. HECO erroneously excluded the Asset Retirement Obligation ("ARO") regulatory asset from rate base in direct testimony. This regulatory asset represents HECO's cost of removal for certain assets as calculated under Financial Accounting Standards Board ("FASB") Interpretation No. 47, "Accounting for Conditional Asset Retirement Obligation" ("FIN No. 47"), adopted in December 2005. FIN No. 47 and the ARO regulatory asset are further described in the response to CA-IR-41 and in HECO T-13, page 32. There should be no impact on rate base from the adoption of FIN No. 47 and from the recording of the ARO. The net book value of the asset cost related to the ARO, plus the regulatory asset, net of the ARO liability should sum to zero. The related ARO liability reduces the net cost of plant in service as presented in updated HECO-WP-1702 on page 13 and inclusion of this regulatory asset in rate base will result in no impact on rate base from the adoption of FIN No. 47. The test year estimate of the unamortized ARO regulatory asset is $27,000, as shown on the June 2007 Update (June 29, 2007), HECO T-17, page 7. See also response to DOD-IR-96, page 2 (updating

HECO-1701). The Consumer Advocate and the DOD accepted the revised estimate. See Stipulated Settlement Letter, Exhibit 1 at 19.

k.

Working Cash

269. Working cash is the net cash needed for smooth fiscal operations. Working cash includes sources and uses of cash from operations. Electric service provided before customers pay for services is a use of cash. This is referred to as the revenue collection lag. Goods and services received before suppliers are paid is a source of cash. This is referred to as the payment lag. HECO's 2007 test year estimates of working cash at present, current effective and proposed rates as presented in direct testimony were $24,122,000, $23,479,000 and $22,247,000, respectively as shown on HECO-1706 and HECO-1706(a). HECO's response to DOD-IR-97 revised the test year estimate of working cash as follows: at present rates, $26,272,000; at current effective rates, $25,719,000; and at proposed rates, $24,751,000. See response to DOD-IR-97, pages 1, 2 (updating HECO-1706) and 3 (updating HECO-1706(a)).

270. The Parties agreed on the items included in the working cash calculation and the revenue and payment lag days except for the items listed below. The Parties settled these items as explained in the Stipulated Settlement Letter, Exhibit 1 at 21-22.

a. Pension Asset Amortization – The Company had proposed the inclusion of pension asset amortization in the working cash calculation. See HECO's June 2007 Update (June 29, 2007), HECO T-17, pages 3 and 12. However, as a result of the removal of pension asset amortization from revenue requirements in this rate case as discussed above, there is no issue with respect to the working cash relating to the pension asset amortization.

b. Pension Expense – The Company's original position was that with the pension asset included in rate base (and prior to the consideration of a pension tracking mechanism), the pension expense should be included in the working cash calculation with a revenue collection lag of 37 days and a payment lag of zero days. See HECO-1706 and HECO-WP-1706, page 32. The Company's position on payment lag days was increased to 14 days based on implementing the pension tracking mechanism which required NPPC funding (with certain exceptions) and the expectation that pension funding under the pension tracking mechanism would be at the end of each month. See June 2007 Update, HECO T-17 (June 29, 2007), pages 2-3 and the Company's response to DOD-IR-100, page 9. The Consumer Advocate objected to the inclusion of pension expense in the working cash calculation absent plans or a study specifically analyzing pension cash flows. See CA T-3, pages 100-101. Acknowledging that the Company does not have specific data on which to base its pension payment lag study, the Company subsequently proposed to increase the payment lag for pension expense from 14 days to 30 days (the payment lag days for "other" O&M non-labor items). The DOD proposed that the pension expense be included in the working cash with 182.5 payment days based on an assumption that HECO would not be contributing to the pension fund in the test year and with no pension asset in rate base. See DOD T-1, page 18. For purposes of settlement and with the acknowledgement that settlement on this item does not reflect any party's position on the inclusion of pension asset in rate base, the Parties agreed to excluding pension expense from the working cash calculation.

c. Amortization Expenses – The Company's position was that these items were paid for in advance of the expense recognition and have zero or negative payment lags or should be included as rate base items. However, the Company proposed to apply the "other" non-labor O&M payment lag days to these items, in recognition of the fact that the Company has not done an extensive search for all amortization items. See response to DOD-IR-100, page 2. The Consumer Advocate and the DOD proposed that amortization expenses (system development costs, regulatory commission expense, Waiau water well, Kahe Unit 7) should be removed from the working cash calculation on the basis that these are non-cash transactions. See CA T-3, pages 99-103, DOD T-1, pages 19-20, and DOD-109, page 2. For purposes of settlement, the Parties agreed to the inclusion of other amortization items in the working cash calculation with a 30 day payment lag.

d. The revised O&M non-labor payment lag days estimate, as a result of incorporating the above discussed items, is 34 days. See Stipulated Settlement Letter, Exhibit 1, HECO T-17, Attachment 1. Other differences in the working cash resulted from differences in the related expense items. For purposes of settlement, the Parties agreed to the O&M non-labor payment lag days of 34 and to the exclusion of pension expense from O&M non-labor in the calculation of working cash. For settlement purposes, the Parties agreed on the following test year estimate of working cash: at current effective rates, $24,348,000; and at proposed rates, $23,651,000.[30] See Statement of Probable Entitlement, Exhibit 1, page 3.

271. In D&O 24171 in the HECO 2005 test year rate case, the Commission adopted interest synchronization as the mechanism for determining interest expense in the 2005 test year. All Parties agreed that interest synchronization should be incorporated for purposes of

[30] Working cash of $23,651,000 at proposed rates is derived from $24,348,000 at current effective rates, less change in working cash of a decrease of $697,000 as shown on Statement of Probable Entitlement, Exhibit 1, page 3.

calculating the interim adjustment for the 2007 test year. See HECO's Motion to Adjust Interim Increase, page 3, (May 21, 2008) and Memorandum in Support of Motion, page 2, (May 21, 2008). Due to the impact of interest synchronization and the establishment of final rates in the 2005 test year rate case on the calculation of revenue and income taxes for the 2007 test year, the estimate of working cash at final rates approved in Docket No. 04-0113 increased by $77,000 to $24,425,000 and working cash at proposed rates was reduced by $1,000, to $23,650, 000. See Memorandum in Support of Motion, Exhibit 1, page 4 (May 21, 2008), which reduced the test year rate base by $1,000. As a result of the corrections to the 2007 test year other operating revenues based on the final rates approved in D&O 24171 in the HECO 2005 test year rate case as explained in paragraph 145 above and the resulting impact on revenue taxes, the September 30, 2008 Revenue Requirement Correction changed slightly the test year working cash at final rates approved in Docket No. 04-0113 to $24,422,000 but did not alter working cash at proposed rates ($23,650,000) as calculated in the Memorandum in Support of Motion to Adjust Interim Increase.

3.

Deductions from Rate Base

a.

Introduction

272. In this case, the following are the sources of funds from non-investors that are deducted from rate base: (1) unamortized contributions in aid of construction ("CIAC"), (2) customer advances, (3) customer deposits, (4) accumulated deferred income taxes, (4) unamortized investment tax credit ("ITC") and (5) unamortized gain on sales.

b.

Unamortized Contributions in Aid of Construction

273. CIAC is money or property that a developer or customer contributes to the Company to fund a utility capital project. As specified in the Company's tariff, the contribution is nonrefundable. Amortization of CIAC offsets depreciation expense. The average unamortized CIAC was estimated by adding its beginning of the year balance to the estimated CIAC additions for the test year, then subtracting the amortization of CIAC to get the estimated end of the year balance. The beginning of the year balance and the end of the year balance were summed and divided by two to estimate the average balance for the test year. See HECO T-17, page 34-35.

274. HECO's estimated average unamortized CIAC for test year 2007 was $167,549,000, as shown on HECO-1705. See HECO T-17, page 34. The estimate was updated in HECO's response to DOD-IR-96, page 2 (updating HECO-1701) to $170,447,000. The Consumer Advocate and the DOD accepted the updated estimate. See Stipulated Settlement Letter, Exhibit 1 at 19.

c.

Customer Advances

275. Customer advances for construction are funds paid by customers to the Company which may be refunded in whole or in part as specified in the Company's tariff. The estimated average customer advances balance for construction for test year 2007 presented in direct testimony was $822,000, as shown on HECO-1701. The estimate was updated in HECO's response to DOD-IR-96, page 2 (updating HECO-1701) to $879,000. The Consumer Advocate and the DOD accepted the updated estimate. See Stipulated Settlement Letter, Exhibit 1 at 19.

d.

Customer Deposits

276. Customer deposits are monies collected from customers who do not meet HECO's criteria for establishing credit at the time they request service. The estimated average customer deposits balance for test year 2007 presented in direct testimony was $6,377,000, as shown on HECO-1701. See HECO T-17, page 36. The estimate was updated in HECO's response to DOD-IR-96, page 2 (updating HECO-1701) to $6,598,000. The Consumer Advocate and the DOD accepted the updated estimate. See Stipulated Settlement Letter, Exhibit 1 at 19.

e.

Accumulated Deferred Income Taxes

277. Accumulated deferred income taxes are the cumulative amount by which tax expense has exceeded tax remittances. This is primarily due to tax timing differences resulting from differences between book depreciation and accelerated depreciation used for the calculation of income taxes. The estimated average accumulated deferred income tax balance for test year 2007 presented in HECO's direct testimony was $155,081,000, as shown on HECO-1701. See HECO T-17, page 36. See also HECO T-15, page 21. HECO's June 2007 Update (June 29, 2007), HECO T-17, page 7, updated the estimate to $146,910,000. In its June 2007 Update Supplement (July 25, 2007), HECO T-15, page 8 (updating HECO-1505), the Company reduced its test year estimate of the ADIT average balance to $146,062,000. Both the Consumer Advocate (CA-101, Schedule B-5) and DOD (Exhibit DOD-110) proposed an adjustment of $8,157,000. This adjustment was intended to reverse an adjustment made by HECO in its June 2007 Update (June 29, 2007), HECO T-15, that eliminated from rate base the deferred taxes associated with AFUDC in CWIP. For purposes of settlement, the Parties accepted the

Company's proposed option to include in rate base the deferred taxes related to both the AFUDC in CWIP and tax capitalized interest ("TCI"), on the condition that the entire balance of the regulatory asset for AFUDC equity gross up and the related deferred taxes also be included in rate base (thus eliminating HECO's proposed adjustment to this regulatory asset). This option resulted in a $5,524,000 reduction to rate base which was composed of a credit of $9,836,000 million to ADIT and an increase to the unamortized net SFAS 109 regulatory asset of $4,310,000, as shown in the Stipulated Settlement Letter, Exhibit 1, HECO T-15, Attachment 1. As discussed in the Pension Asset section above, the Parties also agreed to an exclusion from rate base of $23,114,000 of ADIT related to the pension asset. These and certain other adjustments made to ADIT in this proceeding (e.g., State ITC and depreciation adjustments, as shown in June 2007 Update Supplement, HECO T-15 at 2, 16-19) resulted in an average test year ADIT balance of $132,774,000 which the Consumer Advocate and the DOD accepted. Statement of Probable Entitlement, September 6, 2007, Exhibit 1 at 3.

f.

Unamortized Investment Tax Credits

278. Unamortized ITC are tax credits which reduce tax payments in the year the credit originates, but for ratemaking purposes, the credits are amortized. The estimated average unamortized investment tax credit balance for test year 2007 was $29,930,000, as shown on HECO-1701. See HECO T-17, page 37. In the June 2007 Update (June 29, 2007), HECO T-17, page 7, the estimate was decreased to $29,273,000 and then to $29,294,000. DOD-IR-96. HECO then revised the estimate to $29,284,000 based on the correction to the state ITC addition (from $2,846,000 to $2,825,000) specified in the footnote to the June 2007 Update, HECO T-15, Supplemental Filing, page 7. See Statement of Probable Entitlement, Exhibit 1 at 3. The

Consumer Advocate and the DOD accepted the revised estimate of $29,284,000. See Stipulated Settlement Letter, Exhibit 1 at 19.

g.

Unamortized Gain on Sales

279. Unamortized gain on sales is the gain on the sale of utility property, net of the amount that has been amortized back to ratepayers. The estimated average unamortized gain on sales balance for test year 2007 was $1,395,000 as shown on HECO-1701. In this rate base calculation, unamortized gain on sales included the unamortized lease premium balance. See HECO T-17, page 38. In HECO's June 2007 Update (June 29, 2007), HECO T-17, page 7, the estimate was revised to $1,398,000. See also HECO's response to DOD-IR-96, page 2 (updating HECO-1701). The Consumer Advocate and the DOD accepted this revised estimate. See Stipulated Settlement Letter, Exhibit 1 at 19.

E.

Rate of Return

1.

Introduction

280. The following guidelines apply to the determination of a fair rate of return:

> [A] fair return must:
>
> (1) be commensurate with returns on investment in other enterprises having corresponding risks and uncertainties;
>
> (2) provide a return sufficient to cover the capital costs of the business, including service on the debt and dividends on the stock; and
>
> (3) provide a return sufficient to assure confidence in the financial integrity of the enterprise to maintain its credit and capital-attracting ability.

Re Hawaiian Electric Co., Docket No. 04-0113, Decision and Order No. 24171 (May 1, 2008) ("D&O 24171") at 70; Re Hawaiian Electric Co., Docket No. 7766, Decision and Order No. 14412 (December 11, 1995) ("D&O 14412") at 47; Re Hawaiian Electric Co., Docket No. 7700, Decision and Order No. 13704 (December 28, 1994) ("D&O 13704") at 60-61; Re Hawaiian Electric Co., Docket No. 6998, Decision and Order No. 11699 (June 30, 1992) ("D&O 11699") at 139-40; Re Hawaii Electric Light Co., Docket No. 94-0140, Decision and Order No, 15480 (April 2, 1997) ("D&O 15480") at 31; citing Bluefield Waterworks and Improvement Co. v. Public Service Comm'n, 262 U.S. 679 (1923) and Federal Power Comm'n v. Hope Natural Gas , 320 U.S. 591 (1944). See Re Hawaii Electric Light Co., Docket No. 7764, Decision and Order No. 13762 (February 10, 1995) ("D&O 13762") at 47**;** Re Hawaii Electric Light Co., Docket No. 6999, Decision and Order No. 11893 (October 2, 1992) ("D&O 11893") at 64; Re Maui Electric Co., Docket No. 97-0346, Amended Decision and Order No. 16922 (April 6, 1999) ('D&O 16922") at 33; Re Maui Electric Co., Docket No**.** 96-0040, Decision and Order No. 16134 (December 23, 1997) ("D&O 16134") at 16-17; Re Maui Electric Co., Docket No. 94-0345, Decision and Order No. 15544 (April 28, 1997) ("D&O 15544") at 33; Re Maui Electric Co., Docket No. 7000, Decision and Order No. 13429 (August 5, 1994) ("D&O 13429") at 52; Federal Power Commission v. Memphis Light, Gas & Water Division, 411 U.S. 458 (1973), Permian Basin Rate Cases, 390 U.S. 747 (1968), Duquesne Light Co. vs. Barasch, 488 U.S. 299 (1989).

281. A percentage return on rate base that is at least equal to the Company's composite cost of capital would be a fair rate of return in this docket. The composite cost of capital represents the carrying cost of the money received from investors to finance the rate base. In order to adequately compensate those who have invested in the Company, HECO needs to be

allowed a reasonable opportunity to earn its composite cost of capital. Further, a rate of return on rate base equal to the Company's composite cost of capital would satisfy the three requirements of a fair return. A finding by the Commission of a return on rate base equal to the Company's composite cost of capital would allow the Company to cover the capital costs of the business; it would provide a return on investment commensurate with returns on other investments having corresponding risks; and it would provide assurances to the financial community of the Company's financial integrity (or financial strength). See HECO T-19, page 3.

2.

Cost of Capital

282. The Company's estimated average composite cost of capital is 8.92% for test year 2007, as shown on HECO-1901:

		(A)	(B) = (A)/Total(A)	(C)	(D) = (B)*(C)
		Capitalization			
	WP Series Reference	Amount	Percent of Total	Earnings Requirement	Weighted Earnings Requirements
Short-Term Debt	WP-1902	$ 38,971	3.08%	5.00%	0.15%
Long-Term Debt	WP-1903	480,727	38.01%	6.09%	2.31%
Hybrid Securities	WP-1904	27,556	2.18%	7.47%	0.16%
Preferred Stock	WP-1905	20,586	1.63%	5.51%	0.09%
Common Equity	WP-1906	696,825	55.10%	11.25%	6.20%
Total Capitalization		$1,264,666	100.00%		8.92%
Estimated 2007 Test Year Composite Cost of Capital					8.92%

See HECO T-19, page 4.

283. Capitalization. The Consumer Advocate agreed to utilize the capital structure proposed by HECO. See CA-T-4, page 3. The DOD proposed a test year capital structure based on the average actual quarter-end capitalization for 5 quarters beginning with quarter-end March 2006 and ending with quarter-end March 2007. See DOD T-2, page 26 and DOD-205. For purposes of settlement, the Parties agreed to the capital structure proposed by HECO. See Stipulated Settlement Letter, Exhibit 1, page 23.

284. Cost of Capital. There were no differences between HECO, the Consumer Advocate and the DOD with respect to the cost rates for short-term debt, long-term debt, hybrid

securities and preferred stock. See HECO-1901, CA-413 and DOD-215, page 1. The weighted earnings requirement for short-term debt, long-term debt, hybrid securities and preferred stock is the same for HECO and the Consumer Advocate. See HECO-1901, CA-T-4, page 3 and CA-413. The DOD's weighted earnings requirement for short-term debt, long-term debt, hybrid securities and preferred stock differed due to the DOD's proposed capitalization. See DOD-215, page 1. For purposes of settlement, the Parties agreed to the capital structure as discussed above, therefore there are no differences related to the weighted earnings requirements for short-term debt, long-term debt, hybrid securities and preferred stock. See Stipulated Settlement Letter, Exhibit 1, page 23.

285. Return on Common Equity and Composite Cost of Capital. In HECO's 2007 test year rate case direct testimony, HECO recommended a rate of return on common equity of 11.25% in direct testimony. See HECO T-19, page 56. This resulted in an overall cost of capital of 8.92%. See HECO-1901. The Consumer Advocate proposed that the cost of common equity for HECO is within a range of 9.00% to 11.00%, but proposed to use the middle portion of this range for purposes of computing the test year revenue requirement. Thus the Consumer Advocate recommended a range of 9.50% to 10.50% for the rate of return on common equity, resulting in an overall cost of capital in the range of 7.96% to 8.51% (8.23% mid-point which incorporates a cost of common equity of 10.00%). See CA-T-4, pages 3-5. The Consumer Advocate's specific cost of capital recommendation for HECO was 8.23%. See CA-T-4, page 5. The DOD estimated a range for the rate of return on common equity (9.00% to 9.75%), with a mid-point of 9.375% and a specific cost of equity recommendation of 9.25%. See DOD T-2, pages 2 and 40-41. The 9.25% applied to the DOD's proposed capitalization for HECO produced a cost of capital of 7.70%. See DOD T-2, page 2. For the purpose of reaching a global

settlement in this rate case, HECO, the Consumer Advocate and the DOD agreed on a rate of return on common equity of 10.7% for the test year. This results in a composite cost of capital of 8.62%. See Stipulated Settlement Letter, Exhibit 1, HECO T-19, Attachment 5.

F.

Cost of Service/Rate Increase Allocation/Rate Design

1.

Cost of Service Study

286. A cost-of-service study is a tool used to determine the cost responsibility of the different rate classes served by HECO for ratemaking purposes. Two types of cost studies were prepared for this proceeding, one based on embedded or accounting costs, and the other based on marginal costs. Although both studies reflect the costs of providing service, the procedure and emphasis of each of these two studies are different. The cost-of-service study based on embedded or accounting costs includes all the costs incurred in providing electric service to customers. It includes the test-year estimates of operation and maintenance expenses, depreciation expenses, taxes, plant costs, and return on capital. See HECO T-20, pages 1-2.

287. HECO provided its embedded cost of service study in direct testimony based on a cost classification methodology previously approved by the Commission. See HECO T-20, pages 1-13, HECO-2001 through HECO-2011, HECO-WP-2001; see also responses to DOD-IR-77 and DOD-IR-78.

288. The Company's marginal cost study has been revised since the Company's last rate case filing only for changes in the marginal energy costs. The marginal demand costs and marginal customer costs are unchanged from the Company's last rate case filing (compare

HECO-2012 in this docket with HECO-2211 in Docket No. 04-0113). See response to CA-IR-180 and HECO T-20, pages 13-14.

289. The Consumer Advocate proposed to change the classification of certain distribution costs from customer-related to demand-related costs (CA-T-5, pages 12-28), and proposed to change the classification of some non-fuel production O&M expenses from a demand to an energy classification (CA-T-5, pages 28-31). However, the Consumer Advocate indicated that it would not be unreasonable for the Commission to also consider the HECO approach using methods previously accepted by the Commission. See CA-T-5, page 34. The DOD witness reviewed the principal separations of costs between fixed and variable and reviewed the fixed costs between demand-related and customer-related costs and concluded that the HECO cost of service study uses reasonable methods. See DOD T-3, page 9.

290. For settlement purposes in this case:

a. The Parties concur that agreement on a cost of service methodology is not a requirement to settle the case. The agreements on revenue allocation and rate design presented below are reasonable given the results of both HECO's and the Consumer Advocate's proposed cost of service methodologies;

b. HECO agrees in its next rate case to present a cost of service study utilizing the same distribution classification methodology as it used in this case, as well as a cost of service scenario that classifies all distribution network costs (poles, conduits, lines, and transformers investment and expenses) as demand-related. HECO can present other cost of service scenarios, if desired, and make whatever recommendations it chooses regarding interpretation and utilization of cost of service evidence; and

c. HECO agrees to conduct studies designed to isolate the demand (fixed) versus energy (variable) elements of its non-fuel production O&M expenses for use in the next HECO rate case, to be included in all of HECO's cost of service scenarios.

See Stipulated Settlement Letter, Exhibit 1 at 24.

2.

Rate Design and Proposed Rates

291. Rate design is the conversion or translation of the Company's proposed revenue requirements for each rate class into a pricing structure to collect HECO's required revenues to cover its total costs of providing service. In general, changes to HECO's rates are aimed at aligning the rate elements closer to the cost components, minimizing intra-class subsidy, and moving closer to more efficient pricing that provides more accurate price signals. See HECO T-20, page 14.

292. HECO's proposed rate design in this case is the same as proposed in rebuttal testimony in HECO's 2005 test year case, except as discussed below. In addition, HECO proposes an inclining rate block structure in Schedule R, similar in structure to HELCO's proposal in Docket No. 05-0315. The proposed customer charges and minimum charges are the same as provided in HECO's settlement agreement with the Consumer Advocate and the DOD in September 2005 in HECO's test year 2005 rate case. Proposed demand charges for the commercial rate classes are designed to recover a higher percentage of demand costs than in the past, approximately 50% of demand costs in proposed Schedule J and Schedule H, and approximately 67% of demand costs in the first demand charge tier for Schedules PS, Schedule PP, and Schedule PT. The demand charge difference in the tiers at proposed rates will repeat the existing \$0.50 per billing kilowatt ("kWb") and \$1.50 per kWb differences at the existing rates. The proposed adjustments for supply voltage delivery for Schedule G, Schedule J, Schedule F, and Schedule U are based on a test year 2007 analysis performed by the Transmission Planning division. Finally, energy charges are adjusted to achieve the proposed revenue by rate class. In the case of Schedule J, Schedule PS, Schedule PP, and Schedule PT,

each energy charge tier is proposed to be adjusted by approximately the same amount in cents per kWh. See HECO T-20, pages 14-15.

3.

Inter-Class Allocation of Rate Increase

293. In its Application and direct testimony, HECO proposed to assign the same percentage revenue increase to each rate schedule, namely, an across the board increase of 7.06% to all the rate classes from current effective rates. See HECO Application filed December 22, 2006, page 3; HECO T-20, page 4; HECO-2003, page 2; and HECO T-1, page 31. See also response to CA-IR-185. The Consumer Advocate also proposed that the rate increase should be implemented as an equal percentage increase among rate classes, given the proposed size of the revenue increase and in consideration of customer impacts as well as the cost of service study results. See CA-T-5, pages 36-39. The DOD recommended that any approved rate increase be allocated among customer classes, viewing Schedule PS, Schedule PP, and Schedule PT as a single Schedule P class, with the objective of reducing the existing interclass subsidies. See DOD T-3, page 20.

294. For settlement purposes, the Parties agreed to allocate any interim or final increase in electric revenues to rate classes in the following percentages:

Rate Class	% of Increase $
Schedule R	35.71%
Schedule G	6.65%
Schedule J	25.37%
Schedule H	0.61%
Schedule PS	9.10%
Schedule PP	20.50%
Schedule PT	1.47%
Schedule F	0.59%
Total	100.00%

See Stipulated Settlement Letter, HECO T-20, Attachment 1. This settlement considered the positions of HECO, the Consumer Advocate, and the DOD on cost of service and movement of inter-class revenues towards the respective cost of service positions.

295. The Parties further agreed that Schedule P electric revenues established by this allocation will be further adjusted in the following amounts for the Schedule PP billing credit described below: Schedule PP revenues will be decreased by approximately $2.5 million, Schedule PS revenues will be increased by approximately $2.2 million, and Schedule PT revenues will be increased by approximately $0.3 million, as shown in the Stipulated Settlement Letter, Exhibit 1, HECO T-20, Attachment 1.

296. The Parties agreed that the effect of the stipulated revenue increase allocations, Schedule PP billing credit, and Schedule PS, Schedule PP, and Schedule PT revenue adjustments will be reflected in the approved interim rate increase as follows: Since the interim rate increase will be implemented as a percentage applied to base revenue charges, similar to the implementation of the interim rate increase approved in HECO's test year 2005 rate case, HECO will make the appropriate billing system adjustments to apply a different percentage interim rate increase to Schedule PP customers that are directly served by a dedicated substation and to those that are not, in order to implement the effect of a $3.25 per kW credit and the stipulated revenue adjustments to Schedule PS, Schedule PP, and Schedule PT. See Stipulated Settlement Letter, Exhibit 1, page 25.

4.

Intra-Class Rate Design

297. As stated above, HECO's rate design proposal included customer charges based on the settlement agreement in the test year 2005 rate case, a Schedule R inclining block rate

design, and increases to proposed commercial demand and energy charges based on the HECO cost of service study and the HECO proposed revenue requirement. See HECO T-20, pages 14-15. The Consumer Advocate proposed that HECO retain the existing residential single phase minimum charge while agreeing with the Company's proposed customer charges. See CA-T-5, pages 41-42.

298. The Consumer Advocate recognized that HECO's demand charges represent only a fraction of full unit demand cost, but recommended that demand charges be adjusted upwards more gradually than the Company proposal so as to mitigate rate impacts on low load factor customers. See CA-T-5, page 43. The Consumer Advocate recommended that demand charges increase no more than 10% above those agreed upon in the test year 2005 settlement, with any remaining revenue requirement recovered through energy charges. See CA-T-5, pages 44-45. The DOD generally supported the rate design in Schedules PS, PP, and PT, (DOD T-3, pages 20-21) but suggested that HECO's proposed discount for Schedule PP customers directly served from distribution substations should be \$3.38 per kW rather than the \$1.75 per kW proposed by HECO. See DOD T-3, pages 21-24 and DOD-309.

299. For settlement purposes, the Parties agreed to the following concepts for overall rate design:

a. Customer charges will be set at the level proposed in settlement in the HECO 2005 test year case. See HECO's settlement transmittal letters of September 16, 2005 and September 22, 2005 in Docket No. 04-0113;

b. Demand charges for Schedule J and Schedule H will be increased no more than 15% above the levels proposed in settlement in the HECO 2005 test year case. Demand charges for Schedule PS, Schedule PP, and Schedule PT will be increased no more than 25% above the levels proposed in settlement in the HECO 2005 test year case. See HECO's settlement transmittal letters of September 16, 2005 and September 22, 2005 in Docket No 04-0113;

c. Schedule PP will include a billing credit of $3.25 per billing kW for customers who are directly served from a dedicated substation. The amount of the credit is an agreed upon value to approximate the reduced level of costs that these customers impose on the HECO system. The Company's position is that neither the HECO cost of service study nor the cost of service study approach proposed by the Consumer Advocate accurately depicts the cost to serve Schedule PP customers who are directly served from a dedicated substation. As part of this settlement, the Company agrees in the next HECO rate case to include in the cost of service and propose in rate design a separate rate class for customers who are directly served from a dedicated substation. In this case, the Parties further agree that, to manage the billing impact on Schedule PP customers, the amount of the billing credit above $1.75 per billing kW ($1.50 per billing kW or approximately $2.5 million) will be recovered ratably based on billing kW from Schedule PS and Schedule PT customers. See Stipulated Settlement Letter, Exhibit 1, HECO T-20, Attachment 1;

d. Consideration of the power factor adjustment provision will be deferred to HECO's next rate case. HECO will provide updated estimates regarding completion of its power factor cost study and a plan to recommend appropriate cost-based power factor revisions in the rate design;

e. After revenues are assigned for proposed customer and demand charge levels, the recovery of the remaining class revenue requirement will be from energy charges;

f. HECO indicated in the press release that accompanied its filing of the Application in this case that it would develop a proposal to assist low-income customers. The Parties agree for settlement purposes that the Company's proposed Schedule R should be modified to include a provision for customers in the LIHEAP program to be waived from the higher two tiers of the non-fuel energy charges, which is similar to the proposal before the Commission in the HELCO test year 2006 rate case. The impact of the LIHEAP waiver on revenues is expected to be relatively small and is not included in the calculation of revenues at proposed rates. Therefore, the LIHEAP waiver will have no impact in this rate case on the amount of the rate increase for other customers. See Stipulated Settlement Letter, Exhibit 1, HECO T-20, Attachment 2.

g. For Schedule R, the percentage increase for customers with usages that fall into the lowest non-fuel energy kWh tier will be lower than the overall percentage revenue increase assigned to the Schedule R class. This rate design impact will not take effect until the non-fuel energy rate tiers are approved with a final decision and order in this case. See HECO T-20, pages 19-20 and Stipulated Settlement Letter, Exhibit 1, HECO T-20, Attachment 2, page 1.

See Stipulated Settlement Letter, Exhibit 1 at 26-27.

The settlement rate designs, including the optional time-of-use rates (Schedule TOU-R, Schedule TOU-C, and Schedule U), are set forth in the Stipulated Settlement Letter, Exhibit 1, HECO T-20, Attachment 2, pages 4-6.

5.

Other Revisions to Rate Schedules and Rules

300. HECO proposed revisions to rate schedules and rules similar to what it proposed in the test year 2005 docket, with several exceptions: the Company proposed to close Schedule H to new customers (HECO T-20, page 29), close Rider I to new customers (HECO T-20, page 43), and increase the returned payment fee to $22.00 (HECO T-20, page 48; HECO T-8, page 20; and paragraph 302, below). See HECO T-20, pages 18-64. In addition to the proposed changes to the current rate schedules, the Company proposed in direct testimony three new rate schedules – Schedule TOU-R, Schedule TOU-C, and cost-based changes to its new schedule filed in Docket No. 03-0371, Schedule SS – for Commission approval. See T-20, page 53-58.

301. On December 28, 2006, the Commission issued Order No. 23171 in Docket No. 2006-0497 to initiate an investigation to review and address the HECO Companies' proposed standby service and interconnection tariffs. On March 7, 2008, the parties in that proceeding filed a stipulation which included agreements on Schedule SS of the HECO Companies' tariffs. The rates in the stipulated Schedule SS were different from those that the Company earlier proposed in HECO's 2007 test year rate case. On May 15, 2008, the Commission issued Decision and Order No. 24229 which approved the stipulation. As a result, the Commission should consider HECO's Schedule SS proposal in this rate case to be moot, since it has effectively been superceded by the Schedule SS approved in Docket No. 2006-0497.

302. In its 2007 test year rate case, HECO proposed changes to the service-related charges including the Returned Checks Charge, Field Collection Charge, and Service Establishment Charge as follows:

a. Change the Returned Checks Charge to a Returned Payment Charge and increase the current charge from the current \$7.50 to \$22.00 per returned check or returned payment;[31]

b. Increase the Field Collection Charge from \$15.00 to \$20.00 per field collection call, and modify its application such that, the customer will be charged the Field Collection Charge even when a field call does not result in successful collection of monies[32]; and

c. Increase the Service Establishment Charge from \$15.00 to \$20.00, and increase the additional charge for the same day service or for service outside of the normal business hours from the current \$10.00 to \$25.00.[33]

Proposed revisions to these charges were introduced in direct testimony in HECO's 2005 test year rate case, Docket No. 04-0113. The proposals presented here are identical, except that the proposed Returned Payment Charge is increased from a proposed \$16.00 to a proposed \$22.00 per returned payment based on more current bank charges. See HECO T-20, pages 48-51.

303. The Consumer Advocate generally accepted HECO's proposals, including the Company's TOU rate proposals, but indicated that the Company should be required to submit evidence of the continuing need for Schedule H or a plan for an orderly migration of Schedule H customers onto the other rate schedules in its next rate case. See CA-T-5, pages 48-49. The DOD did not address these proposed revisions in its testimony. The Company is willing to eliminate Schedule H in its rate design proposal in the next HECO general rate case.

[31] D&O 24171 in Docket No. 04-0113 approved a Returned Payment Charge of \$16.00.

[32] D&O 24171 in Docket No. 04-0113 (page 102) ruled that HECO may increase its Field Collection Charge from \$15.00 to \$20.00 per field collection call but it shall not modify its rules to allow the field collection to be charged to customers when a field call does not result in the successful collection of monies.

[33] D&O 24171 in Docket No. 04-0113 approved a Service Establishment Charge of \$20.00 and an additional charge of \$25.00 for the same day service or for service outside of normal business hours.

304. The Parties agreed for settlement purposes to the following other revisions to rate schedules:

a. The clarification of the Apartment House Collection Arrangement in Schedule R;

b. No changes to Schedule E;

c. Modification of Schedule J to add a maximum qualifying load of less than 300 kW for new customers and to add a clause that allows existing customers with loads equal or greater than 300 kW to remain on Schedule J;

d. Modification of the Schedule J billing demand ratchet from the current 75% ratchet to the average demand ratchet (same as Schedule P);

e. Modification of Schedule J, Schedule PS, Schedule PP, and Schedule PT to include a five year term of contract provision and add a service termination charge, which is the same proposal advanced by the Company in the test year 2005 rate case;

f. Closing Schedule H to new customers. HECO will eliminate Schedule H in its rate design proposal in the next HECO rate case (see HECO T-20 at 29);

g. Modification of Schedule PS, Schedule PP, and Schedule PT to add a minimum qualifying load of 300 kW for new customers and to add a clause that allows existing customers with loads less than 300 kW to remain on Schedule PS, Schedule PP, and Schedule PT;

h. Elimination of the 150 kW minimum power service under the Schedule PS, Schedule PP, and Schedule PT minimum billing provision;

i. For Rider T, adding terms and conditions to allow customers to do emergency maintenance on their generating equipment without considering its impact on the customers' maximum on-peak demand in the determination of their billing demand;

j. For Rider M, changing the initial term of contract to five years;

k. Closing Rider I to new customers (see HECO T-20 at 43);

l. For Schedule Q, implementing the changes proposed by HECO in HECO T-20, pages 44-45;

m. Changing the Returned Checks Charge, Field Collection Charge, and Service Establishment Charge as described above in paragraph 302;

n. Eliminating the Rule No. 4, Section D, Standard Form Customer Retention Rates; and

o. Eliminating the electric vehicle charging rates, Rider EV-R and Rider EV-C.

See Stipulated Settlement Letter, Exhibit 1, pages 27-28.

The Company's proposed changes identified in the above paragraph as items (a) through (e), (g) through (j), (n) and (o) and the Field Collection Charge, Service Establishment Charge and the additional charge for the same day service or for service outside of the normal business hours in (m) were identical to the proposal in the 2005 test year rate case in Docket No. 04-0113. In D&O 24171 the Commission found to be reasonable and approved HECO's proposed rate design in the 2005 test year rate case. See D&O 24171, provision 11 at 102. All other rate schedule changes listed in the paragraph above were introduced as new proposals in direct testimony in HECO's 2007 test year rate case, Docket No. 2006-0386. Further, D&O 24171 (page 102) ruled that HECO may increase its Field Collection Charge from $15.00 to $20.00 per field collection call but it shall not modify its rules to allow the field collection to be charged to customers when a field call does not result in the successful collection of monies. Given this ruling, HECO does not pursue in its 2007 rate case a modification to its rules such that the customer will be charged the Field Collection Charge even when a field call does not result in successful collection of monies.

III.

Ultimate Findings of Fact and Conclusions of Law

305. HECO and the Consumer Advocate propose the following Ultimate Findings of Fact and Conclusions of Law:

a. The operating revenues, operating expenses, and operating income for the 2007 test year, as set forth in Exhibit 1 of the September 30, 2008 Revenue

Requirement Correction and reproduced as Exhibit 2 to this document, are reasonable;

b. HECO shall not include $59,405,000 of its pension asset, net of an adjustment to ADIT reserve of $23,114,000, in its rate base;

c. HECO shall utilize the interest synchronization method to calculate its interest expense for the purpose of determining income tax expense in the test year – applying this method, HECO's interest expense of $30,475,000 is reasonable;

d. The test year average depreciated rate base under final rates implemented in Docket No. 04-0113 is $1,159,087,000 and under approved rates is $1,158,315,000;

e. The capital structure for the test year is as follows: 3.08 percent for short-term debt; 38.01 percent for long-term debt; 2.18 percent for hybrid securities; 1.63 percent for preferred stock; and 55.10 percent for common equity. The costs of capital are 5.00 percent for short-term debt; 6.09 percent for long-term debt; 7.47 percent for hybrid securities; 5.51 percent for preferred stock; and 10.70 percent for common equity. A fair rate of return for the 2007 test year is 8.62 percent;

f. HECO is entitled to a final total rate increase that will produce a revenue increase of $77,466,000 (or 5.52 percent over revenues at final rates implemented in Docket No. 04-0113);

g. HECO's field collection charge shall continue to be $20.00 but it shall not modify its rules to allow the field collection charge to be charged to customers when a field call does not result in the successful collection of monies;

h. HECO's proposal for Schedule SS in this proceeding is moot.

i. HECO's proposed cost of service, revenue allocation, and rate design, modified as discussed in paragraphs 294 through 304 are reasonable, and are therefore approved;

j. Final Commission approval of the pension and OPEB tracking mechanisms approved on an interim basis in Interim Decision and Order 23749 and rates that incorporate the 2007 test year NPPC of $17,711,000 and NPBC of $6,350,000, as agreed by the Parties, is just and reasonable;

k. HECO's ECAC complies with Act 162 and should be implemented as the Company has proposed in its direct testimony HECO T-9 and as the Parties agreed, as explained in Part II.C.1.b. ("ECAC Revenues") above.

DOCKET NO. 2006-0386
HECO 2007 TEST YEAR RATE CASE

AGREEMENTS REACHED AMONG HECO, THE CONSUMER ADVOCATE AND THE DEPARTMENT OF DEFENSE

SALES FORECAST AND REVENUES

1. Sales – The Parties agree on the test year sales estimate of 7,720.8 GWh and accept the test year sales by rate schedule and the average number of customers as shown on HECO-201.

ELECTRIC SALES REVENUES

2. See Fuel Expense section for discussion on ECAC revenues.

In its June 2007 Update, HECO included eight months of revenues in the test year for the interim surcharge for DG fuel and trucking and LFSO trucking costs (at current effective rates) as approved by Order No. 23377 in Docket No. 04-0113. In their respective Direct Testimony filings, both the Consumer Advocate and the DOD proposed to include twelve months of revenues (i.e., $5,358,200) for this surcharge in the test year. (See August 2007 Supplement (September 6, 2007), HECO T-3, Attachment 1, page 1.) (See CA-101, Schedule C-2.) HECO agrees to include $5,358,200 of revenues in the test year, which constitutes twelve months of revenue for the interim surcharge for DG fuel and trucking and LFSO trucking costs.

Incorporating the above adjustment, the Parties agree that HECO's total electric sales revenues at current effective rates are $1,406,573,200 for the test year. (This is the sum of $837,698,900 of base revenues and ($3,190,700) of AES credit from the June 2007 Update (June 27, 2007), HECO T-3, page 4; $566,706,800 as shown on page 4 of this Exhibit 1 and $5,358,200 of interim surcharge revenues as shown above.)

OTHER OPERATING REVENUES

3. Miscellaneous Other Operating revenues were decreased by $71,000 in the June 2007 Update (June 15, 2007), HECO T-13, page 4, from $1,695,000 to $1,624,000. Amortizations of deferred gains were decreased by approximately $7,000 due to a delay in the sale of the Aiea Park Place property, and Property Licenses and Leases revenues were decreased by $64,000 (from $280,000 to $216,000), as explained in the responses to CA-IR-299, 449 and 450, and the June 2007 Update (June 15, 2007), HECO T-13, page 4. The Consumer Advocate and DOD did not propose any adjustments to the amounts submitted by the Company.

In addition, in the June 2007 Update (June 29, 2007), for HECO T-8, page 2, late payment charges were revised for the updated revenue estimates for the 2007 test year. This resulted in an increase of $2,900 in late payment charges associated with both sales revenues at present rates and sales revenues at current effective rates. See ~~updated HECO-807 on page 8 of~~, June 2007 Update ~~for~~(June 29, 2007), HECO T-8, page 2 and page 8 (updated HECO-807). The Consumer Advocate did not propose any adjustment to HECO's updates, and also did not consider an estimate of late payment charges for the Consumer Advocate's recommended increase in revenue requirements. During the settlement discussions, the Parties agreed to resolve their differences as part of a global settlement. As a result, the Parties agree to multiplying a late payment charge factor of .095% to the electric sales revenues at interim rates to determine the late payment charges at interim rates.

Incorporating the above adjustments, the Parties agree for purposes of settlement that HECO's total other operating revenues at current effective rates for the test year are $3,384,000. (See Supplemental Information, HECO T-3, Attachment 1, page 1, hereto for supporting calculation.)

EXPENSES

FUEL EXPENSE

4. Fuel Oil and Fuel Related Expense

Test year fuel oil expense and fuel related expense were $536,833,000, and $6,128,000, respectively in HECO's direct testimony, HECO T-4, page 1. See also HECO-401 and HECO-405. In HECO's response to CA-IR-214, page 7 and in HECO T-4 June 2007 Update (June 15, 2007), fuel oil expense and fuel related expense were increased to $537,767,000 and $6,107,000, respectively. The Consumer Advocate recommended fuel oil expense and fuel related expense estimates of $536,971,000 and $6,100,000, respectively. See CA-101, Schedule C-3 and CA-201. The DOD reflected HECO's June 2007 Update in its test year expense estimates. See DOD-104.

The differences between HECO and the Consumer Advocate were primarily due to the use of different versions of the P-Month production simulation model. As noted in CA-T-2, page 21, lines 6-7, the Consumer Advocate believes that the results of the two models were comparable and reasonable.

As a result, for purposes of reaching a global settlement, the Consumer Advocate and the DOD agree to reflect the results of HECO's production simulation model as presented in HECO's response to CA-IR-214 and HECO T-4 June 2007 Update (June 15, 2007), for purposes of determining HECO's test year fuel and fuel related expense. The agreement results in $537,767,000 for fuel oil expense (based on August 2006 fuel prices) and $6,107,000 of fuel related expense for a total test year fuel expense of $543,874,000. See CA-IR-214, page 7.

5. ECAC Revenues

In its direct testimony, the Company estimated $563,541,200 of Energy Cost Adjustment Clause ("ECAC") revenues for the 2007 test year (at current effective rates and at present rates). See June 2007 Update (June 27, 2007), HECO T-3, Supplemental, page 4. The changes in the Company's fuel oil and fuel related inspection costs and purchased energy costs from the fuel costs embedded in base rates are recovered through the ECAC. At proposed rates, the Company is proposing to include in the ECAC the trucking cost of fuel to the Honolulu Plant and fuel additive costs for HECO generating units. Distributed generating ("DG") fuel, trucking costs and fuel related inspection costs will be included in the ECAC under a new DG energy component, as HECO proposed in Docket No. 04-0113. The Company is also proposing to include a weighted efficiency factor in its ECAC calculations (in the same manner as HELCO proposed in Docket No. 05-0315), based on fixed efficiency factors for LSFO, diesel and "other" generating units. Because DG units are generally more efficient than other generating units, the Company proposes not to apply a fixed efficiency factor to DG fuel and transportation costs. With respect to Act 162, HECO stated that its ECAC complies with the statutory requirements of Act 162 and the current level of ECAC fuel price risk-sharing is appropriate, and that no change is necessary to the current ECAC risk-sharing approach.

In its June 2007 Update (June 27, 2007), HECO T-3, Supplemental, page 4, the Company revised its test year estimate of ECAC revenues to $566,012,100 (at current effective and present rates).

In CA-T-1, the Consumer Advocate agreed that the ECAC should continue to be employed and did not object to the continuation of the ECAC to provide HECO with recovery of changes in energy costs. In CA-T-2, the Consumer Advocate agreed with the Company's proposal to include Honolulu trucking costs, DG fuel and trucking costs and additive costs in the ECAC and to use a three-part sales heat rate for HECO's units. The Consumer Advocate did not oppose HECO's proposal to not subject DG units to a fixed efficiency factor, provided that HECO be required to continue to annually file calibration reports with the Commission and the Consumer Advocate. In CA-101, Schedule C-3, the Consumer Advocate proposed a reduction of $463,000 to the 2007 test year ECAC revenues (at current effective rates and present rates), based on its calculation of fuel and purchased energy for the test year.

In DOD T-3, the DOD stated that it would be appropriate to use the three efficiency factor approach proposed by HECO and to flow through the actual cost per kWh associated with DG energy without application of a fixed efficiency factor. The DOD accepted the Company's test year estimate of ECAC revenues.

For purposes of the interim rate increase, the Parties agree that the ECAC should continue in its present form. (See discussion on Act 162 below.) Furthermore, as a result of the settlement discussions, the Parties agree on the methodology for calculating the Energy Cost Adjustment Factor ("ECAF"), including the inclusion of fuel additives, fuel trucking, the addition of the "DG Component", and the use of three fixed efficiency factors to replace the single Central Station efficiency factor at present rates, as proposed in HECO T-9. HECO will continue to annually file calibration reports with the Commission and the Consumer Advocate. The Parties agree that the ECAF at present rates is 7.340 cents/kwh, and that the ECAF at proposed rates is 0.000 cents/kwh. (See HECO T-9 Attachment 7~~.)~~, hereto, pages 8 and 11.) This factor incorporates the $620,000 adjustment to the test year purchased power expense projection as explained below.

Applying the 7.340 cents/kwh ECAF to the agreed upon test year forecasted kwh sales projection results in ECAC revenues of $566,706,800 (at present rates and current effective rates). (See August 2007 Supplement, HECO T-3, Attachment 1, page 1.) The Parties agree that the sales heat rates used in the ECAF as fixed efficiency factors at proposed rates are:

LSFO plants:	0.011143 mbtu/kwh
Diesel plants:	0.034955 mbtu/kwh
Other plants:	0.011209 mbtu/kwh
Weighted average:	0.011209 mbtu/kwh

(See, HECO T-9, Attachment 7 hereto, page 5; see also June 2007 Update (June 15, 2007), HECO T-9, page 27.)

Act 162

In accordance with Act 162, 2006 Session Laws of Hawaii ("Act 162"), the Commission added the following issue in Order No. 23612, issued August 24, 2007: "Whether HECO's ECAC complies with the requirements of HRS §269-16(g)?" Thus, the Parties have not yet determined how to develop the ECAC design factors identified in HRS §269-16(g). The Parties are continuing discussions with respect to the final design of the ECAC to be approved in the final decision and order and will either submit a further stipulation regarding this matter, or address the matter in their respective proposed findings of fact and conclusions of law. The Parties agree, however, that their resolution of this issue will not affect their agreement regarding revenue requirements, and that it is appropriate for the Commission to issue its interim rate order based on the stipulated revenue requirements. [Update: The Parties agree that for the purposes of Docket No. 2007-0386, the Commission should approve the ECAC design that the Company has proposed in HECO T-9, incorporating the agreements reached between the Parties in this settlement letter and in HECO T-9 Attachment 7 hereto.]

POWER PURCHASE EXPENSE

6. Test year purchased power expense was $386,108,000 in direct testimony, HECO T-5, page 1 and HECO-501, and increased to $386,872,000 in HECO T-5 June 2007 Update (June 15, 2007), page 3. In direct testimony, the Consumer Advocate recommended a test year purchased power expense estimate of $387,518,000, which is $646,000 more than HECO's June 2007 Update. See CA-101, Schedule C-3 and CA-201. In support of

its recommendation, the Consumer Advocate noted that the AES base fuel component for one boiler in the month of October was not calculated in HECO's direct testimony and in its June 2007 Update estimates. See CA-T-2, page 34, line 21 to page 35, line 2. During the settlement discussions, HECO agreed with the Consumer Advocate that there was an error in HECO's workpapers and recalculated its AES energy payment. As a result, HECO proposed to increase its AES energy payment by $620,000. See HECO T-5, Attachments 1 and 2 hereto for the calculations supporting the $620,000 adjustment. After the above adjustment, there remained a difference of $26,000 between HECO and the Consumer Advocate. (The difference is equal to the June 2007 Update (June 15, 2007), HECO T-5, page 3, amount of $386,872,000 plus the $620,000 AES adjustment for a total of $387,492,000, minus the Consumer Advocate's proposed $387,518,000.)

For purposes of settlement, the Consumer Advocate and the DOD agree to reflect HECO's purchased power expense of $386,872,000 as provided in HECO T-5 June 2007 Update (June 15, 2007) page 3, plus an additional $620,000 to correct the AES energy charges related to the AES base fuel component in the month of October, for a total purchased power expense of $387,492,000 for the test year.

OTHER PRODUCTION O&M EXPENSES

7. Test year production O&M expenses were estimated to be $68,222,000 in HECO's direct testimony (HECO T-6, page 2 and HECO-601), which was increased by a net $1,855,000 to $70,077,000 in the Company's HECO T-6 June 2007 Update (Attachment 1, page 1), filed on June 29, 2007, and HECO T-6 June 2007 Supplemental Update (Attachment 1, page 1), filed on July 25, 2007. The Consumer Advocate's estimate was $66,436,000 (CA-101, Schedule C, page 1), or $3,641,000 lower than HECO's T-6 June 2007 Supplemental Update estimate of $70,077,000, due to seven adjustments that are discussed below (see discussion in subparagraphs a through h). The DOD also proposed one adjustment to reduce production security services expense by $117,000 (see discussion in subparagraph ~~i~~h). As a result of the settlement reached on these eight issues as described below, the Parties agree to reduce HECO's T-6, June 2007 Supplemental Update estimate of $70,077,000 by $2,479,000, resulting in revised test year production O&M expenses of $67,598,000. (The $2,479,000 is the sum of the following adjustments: $175,000 (Environmental 316(b)), $243,000 (Generation Bidding), $1,813,000 (Deferred Station Maintenance), $225,000 (R&D), $6,000 (Expiring Software), and $18,000 (Abandoned Projects). The $1,000 difference is due to rounding.)

In addition, all Parties agree to the Company's production inventory of $6,678,000 as presented in direct testimony. See HECO-1703.

a. Environmental 316(b) Expense Update

In HECO T-6 June 2007 Update (June 29, 2007) page 3, HECO proposed to increase its 2007 test year production operations non-labor expense by a 3-year normalized amount of $1,006,000 to comply with the EPA's Clean Water Act Section 316(b) Phase II rules.

In CA-T-1 (CA-101, Schedule C-6), the Consumer Advocate proposed a $175,000 adjustment reducing HECO's June 2007 Update expense estimate to $831,000. For purposes of a global settlement, the Company agrees to reflect the Consumer Advocate's proposed adjustment, resulting in $831,000 of environmental expenses for the test year.

b. Generation (Competitive) Bidding Division Expense Update

In HECO T-6 June 2007 Update (June 29, 2007), Attachment 1, page 1, the Company increased its Generation Bidding Division non-labor expense by $243,000. In CA-T-1 (CA-101, Schedule C-7), the Consumer Advocate proposed a $243,000 reduction to allow only the $175,000 level of non-labor expenses initially estimated by HECO to be incurred in 2007, and cited the Company's actual spending through May 2007 as support for its proposed adjustment. During the settlement discussions, the Company provided additional support for its updated estimate of 2007 non-labor costs for this Division , and the reasons for its higher normalized test year estimate. The Consumer Advocate did not dispute that additional future outside services expenses may be incurred by HECO to support competitive bidding, but objected to the inclusion of any costs that are expected to be incurred after 2007 in the test year estimate on the grounds that such inclusion would violate the Test Year concept. As part of the overall settlement of issues impacting revenue requirements, the Company agrees to reduce its Generation Bidding Division non-labor expense by $243,000, resulting in a total expense projection of $175,000 for the test year.

c. Production O&M Labor Adjustment

In CA-T-1 (CA-101, Schedule C-4), the Consumer Advocate proposed a $953,000 reduction to production O&M labor expense but stated its willingness to consider equitable revisions to its labor adjustment for the maintenance accounts if HECO could show clear evidence that it requires additional supplemental labor to meet normal, on-going maintenance requirements because of the Company's inability to fill vacant positions in the Maintenance Division. During settlement negotiations, HECO provided additional information to address the Consumer Advocate's stated concern. After considering the supplemental maintenance labor cost information provided by the Company and the adjustments proposed for deferred station maintenance as described below, the Consumer Advocate accepted the Company's position that no adjustment to HECO's Production O&M labor expense is required. See HECO T-6, Attachment 3, August 2007 Supplement.

d. Deferred Station Maintenance List Projects Adjustment

In CA-T-1 (CA-101, Schedule C-5) the Consumer Advocate proposed a $1,813,000 reduction to production O&M expense to eliminate the costs associated with certain lower priority power station maintenance projects that were included in HECO's test year forecast. The proposed adjustment was based on HECO's representation in response to CA-IR-240, 241, and 242 that certain projects on the Kahe Station, Waiau Station and Honolulu Station priority lists would not be done in 2007. During the settlement discussions, HECO opposed the adjustment, and provided additional information on unbudgeted priority list items that have been or will be done in 2007. After reviewing the material, the Consumer Advocate continued to assert that its proposed adjustment is reasonable, citing the Company's discretion to proceed with station maintenance work, actual spending through July 2007, and the Consumer Advocate's reconsideration of its Production labor expense adjustment (see discussion in subparagraph c). As part of the overall settlement of the issues impacting the test year revenue requirements, the Company accepts the Consumer Advocate's $1,813,000 adjustment to reduce the deferred station maintenance expense estimate for the 2007 test year.

e. Production Department Research and Development Adjustment

In CA-T-1 (CA-101, Schedule C-8), the Consumer Advocate (1) removed funding of $221,000 for the Electric Shock Absorber ("ESA") from the test year expense estimate based upon the uncertain status of future activities and costs related to this project, and (2) reduced the budgeted amounts for the other R&D spending initiatives (which it assumed was $754,000[1]) by one third, offset by HECO's actual spending through April 2007 ($30,656), to recognize that one third of the year has passed with very little activity or spending to-date, and the apparent uncertainties and potential delays in actual activities and expenditures. The net effect was to reduce the $935,000 amount proposed by HECO by $442,000 resulting in a test year expense estimate of $493,000. Upon consideration of the additional information provided by HECO during the settlement discussions describing HECO's additional funding commitments, the Consumer Advocate indicated its willingness to reduce the CA-101, Schedule C-8 adjustment of $442,000 to a revised reduction of $225,000. (See HECO T-6, Attachment 5, August 2007 Supplement and footnote 2 below.) For purposes of settlement, the Company accepts the Consumer Advocate's compromised $225,000 adjustment,[2] which reduces HECO's test year production R&D expense estimate to $710,000.[3]

f. Expiring Software Amortization

In Direct Testimony (HECO T-13, pages 18-20, and HECO-1304, page 9), HECO proposed to include $108,000, which represents the amortization through September 2007 of prepaid software expense that was paid to MINCOM, HECO's Ellipse software vendor. See Supplemental Information, HECO T-13, Attachment 3, hereto. As noted in CA-T-3, pages 70- 71, the amortization period for this expense was reflected in the

[1] $754,000 + $221,000 = $975,000, not $935,000. Based on HECO-629, the Consumer Advocate assumed that $40,000 for Sun Power for Schools expenses were included in the test year estimate. However, the 2007 budget (and, thus, the 2007 test year estimate) also includes a $40,000 credit, so that the net amount included in the test year was zero. See response to CA-IR-80. If the inclusion of the $40,000 is backed out of the Consumer Advocate's proposed adjustment, the Consumer Advocate's adjustment would be reduced from ($442,000) to ($428,000).

[2] The Consumer Advocate's compromise adjustment was based on allowance of $25,000 for disposal of damaged equipment for the ESA, taking into account the range of disposal costs estimated by HECO, and $36,000 for recurring renewable energy funds, taking into account actual expenditures through July 2007 and anticipated HNEI billings. (The $225,000 revised reduction is the sum of the following: ESA expense of $221,000 less allowed $25,000 = $196,000 disallowed; and recurring renewable energy funds expense of $65,000 less allowed $36,000 = $29,000 disallowed.)

[3] $935,000 minus $225,000 equals $710,000.

Stipulated Settlement Letter accepted by the Commission for purposes of Interim Decision and Order No. 22050 in HECO's 2005 test year rate case. Although this software amortization would be recorded for nine months in 2007, the Consumer Advocate proposed that the $108,000 of amortization be eliminated from the test year revenue requirement, noting that the amortization would not continue beyond September 2007. As shown on CA-101, Schedule C, page 3, Adjustment C-15, the Consumer Advocate allocated the $108,000 adjustment as follows:

Production	$ 6,000
Transmission	$ 3,000
Distribution	$ 11,000
A&G	$ 88,000
Total	$108,000

For purposes of settlement, the Company accepts the Consumer Advocate's adjustment and will remove the MINCOM amortization expenses from HECO's test year expense estimates for the above accounts.

g. Abandoned Projects Normalization Adjustment

In Direct Testimony (HECO T-10, pages 55-56), HECO proposed to include an estimate of $224,000 for abandoned project costs in the test year revenue requirement. In CA-T-3 (CA-101, Schedule C-19), the Consumer Advocate proposed a $122,000 adjustment to reflect an average of the actual abandoned projects costs for 2001 through 2006, without escalating the costs to 2007 dollars, and excluded the costs related to the Barbers Point NAS privatization costs. As noted on CA-101, Schedule C, page 4, Adjustment C-19, the Consumer Advocate allocated its proposed $122,000 adjustment to reduce HECO's test year estimates as follows:

Production	$ 9,000
Transmission	$ 3,000
Distribution	$104,000
Customer Accounts	$ 7,000
A&G	($ 2,000)
Total	$122,000

The DOD did not propose any adjustment in this area.

As a result of the settlement discussion, the Consumer Advocate agreed to reduce its total abandoned projects normalization adjustment [from $122,000] to $94,000. [This reflects the actual abandonment write-off in 2005 of $130,000 (See HECO-1019, page 2)]. Using the distribution between functional accounts provided by HECO T-10, Attachment ~~4~~1, hereto, the Consumer Advocate's revised abandoned project cost adjustment of $94,000 is reflected as follows:

Production	$ 18,000
Transmission	$ 10,000
Distribution	$ 51,000
Customer Accounts	$ 13,000

A&G	$ 2,000
Total	$ 94,000

For purposes of settlement, the Company accepts the Consumer Advocate's revised adjustment and allocation as noted above.

h. Security Services Expense Adjustment
In DOD T-1 (DOD-116), the DOD proposed to reduce the Company's security services expense by $117,000. The DOD's adjustment was based on HECO's security services expense through June 2007, which DOD annualized and deducted from HECO's test year estimate. The Company provided additional information in support of its position that the funds for annual security services, as originally estimated at $730,280 are expected to be spent in 2007, and proposed that no adjustment be made. (See HECO T-6, DOD Attachment 1, August 2007 Supplement.) For settlement purposes, the DOD agrees to no adjustment to HECO's security services expense.

TRANSMISSION AND DISTRIBUTION (T&D) O&M EXPENSES

8. Test year transmission O&M expenses were estimated to be $10,491,000 in direct testimony (HECO T-7, page 4 and HECO-702), which was decreased by a net $113,000 to an updated total of $10,378,000 in the Company's HECO T-7 June 2007 Update, filed on June 29, 2007. Test year distribution O&M expenses were estimated to be $24,722,000 in direct testimony (HECO T-7, page 4 and HECO-702), which was increased by a net $226,000 to an updated total of $24,948,000 in the Company's HECO T-7 June 2007 Updated, filed on June 29, 2007. The result is a test year estimate of $35,326,000 for T&D. (See HECO T-7, June 2007 Update (June 29, 2007), Attachment 1.) After reflecting the adjustments proposed by HECO in the June 2007 Update, the Consumer Advocate proposed adjustments amounting to $509,000 resulting in a test year T&D estimate of $34,817,000, consisting of $10,258,000 and $24,559,000 for transmission and distribution, respectively (CA-101, Schedule C, page 1). The $509,000 adjustment proposed by the Consumer Advocate consisted of the following: $388,000 (CA-101, Schedule C-13), $14,000 (see subparagraph 7.f above and CA-101, Schedule C-15) and $107,000 (see subparagraph 7.g above and CA-101, Schedule C-19) to reduce T&D O&M labor expenses, remove the expiring MINCOM amortization and normalize the abandoned projects expense estimate, respectively. The DOD did not propose any adjustment to T&D O&M expenses. As a result of the settlement reached on the three issues as described below, the Parties agree on a reduction of $391,000 (sum of $316,000 payroll adjustment, $14,000 expiring software amortization and $61,000 abandoned projects normalization) to HECO's June 2007 Update, resulting in a revised test year estimate of $10,272,000 for transmission O&M expenses and $24,663,000 for distribution O&M expenses.

In addition, all Parties agree to the Company's T&D inventory of $6,160,000 as presented in direct testimony. See HECO-1703.

a. T&D Payroll Expense Adjustment

In CA-T-3 (CA-101, Schedule C-13), the Consumer Advocate proposed a T&D O&M labor expense adjustment of $388,000 to reduce HECO's test year expense estimate for 14 employee positions. The proposed adjustment was based on the beginning of test year actual T&D Employees (December 31, 2006) and HECO's end of year estimate (December 31, 2007) of T&D employee levels. During the settlement discussions, the Company provided information regarding the hiring of employees and unbudgeted temporary hires in January of the test year and proposed a lower T&D labor expense adjustment. After reviewing the information the Consumer Advocate agreed to revise its adjustment to reflect the compensation for 11 employees (versus the 14 upon which the Consumer Advocate based its $388,000 adjustment). The result is a revised adjustment of $316,000. The adjustment reduces HECO's 2007 Update estimates by $93,000 and $223,000 for transmission and distribution O&M labor, respectively (see HECO T-14, Attachment 1(B~~)~~) hereto). For purposes of settlement, HECO agrees to accept the Consumer Advocate's revised adjustment.

b. Expiring Software Amortization

As discussed in subparagraph 7.f. above, in CA-T-3 (CA-101,Schedule C-15), the Consumer Advocate proposed reductions of $3,000 and $11,000 to transmission O&M non-labor expenses and distribution O&M non-labor expenses, respectively to eliminate the MINCOM amortization fee which will terminate in September 2007. For purposes of settlement, the Company accepts the Consumer Advocate's adjustments.

c. Abandoned Projects Normalization Adjustment

As discussed in subparagraph 7.g. above, in CA-T-3 (CA-101, Schedule C-19), the Consumer Advocate proposed reductions of $3,000 and $104,000 to transmission O&M and distribution O&M non-labor expenses, respectively for abandoned projects. As a result of the settlement discussions, the Parties agree to reflect a revised reduction of $10,000 and $51,000 to the transmission and distribution expense estimates, respectively.

CUSTOMER ACCOUNTS

9. Test year customer accounts expenses, excluding allowance for uncollectible accounts, were estimated at $12,020,000 (HECO-801, page 1) in HECO's direct testimony. (See, HECO T-8, pages 2-3.) The Company's test year estimate decreased to $11,929,000 in the June 2007 Update for HECO T-8, filed on June 29, 2007 (updated HECO-801, pages 9 and 10 of the June 2007 Update for HECO T-8), which reflected a reduction for Customer Records and Collections of $91,000. In the response to CA-IR-428.d, HECO proposed a further reduction of $66,900 for non-labor expenses for temporary services. The result is a revised test year estimate of $11,862,100.

In its direct testimony, the Consumer Advocate recommended a test year customer account expense estimate of $11,729,000 (CA-101, Schedule C, page 1) resulting in a difference of $133,100 from HECO's revised test year estimate of $11,862,100. The differences resulted from the following:

- The Consumer Advocate reflected an adjustment of $88,000 (CA-101, Schedule C, page 2 and CA-101, Schedule C-1; $88,000 is equal to the sum of lines 18 and 19) to reduce the Company's direct testimony estimate, as opposed to the $91,000 proposed in HECO's June 2007 update, resulting in a $3,000 difference.
- In addition, the Consumer Advocate proposed an adjustment of $85,986 (rounded to $86,000) to reduce expenses for temporary services (CA-101, Schedule C-9, line 7), which is $19,086 (rounded to $19,100) more than the $66,900 reduction proposed by HECO in its response to CA-IR-428.d.
- The Consumer Advocate also proposed an adjustment to exclude $110,000 for Bank of Hawaii fees (CA-101, Schedule C-9, line 11).
- The Consumer Advocate proposed a $7,000 adjustment to normalize the abandoned project costs included in the test year revenue requirement, as discussed in subparagraph 7g. above. (See, CA-101, Schedule C, page 4, adjustment C-19.)

The DOD did not propose any adjustments for customer accounts.

For purposes of settlement, HECO will accept the Consumer Advocate's adjustments for temporary services and Bank of Hawaii fees and reflect the Company's June 2007 Update revision (i.e., the $91,000). In addition, as noted above, the differences regarding the adjustment to normalize the test year abandoned project costs were resolved. (See subparagraph 7.g for discussion regarding abandoned project costs.)

As a result, the Parties agree on a test year estimate of $11,720,000 for customer accounts expense, excluding the allowance for uncollectible accounts.

ALLOWANCE FOR UNCOLLECTIBLE ACCOUNTS

10. In the June 2007 Update (June 29, 2007) for T-8, HECO revised its estimates for uncollectible accounts expense due to updated revenue projections for the 2007 test year. The uncollectibles factor was not changed. The estimates of uncollectible accounts expense increased by:

1. $3,000 from $1,358,000 to $1,361,000, at present rates; and
2. $2,000 from $1,411,000 to $1,413,000, at current effective rates.

The changes in the test year estimates are reflected on the updated HECO-805 (page 7 of the June 2007 (June 29, 2007) Update for HECO T-8).

The Consumer Advocate disagreed with HECO's methodology for calculating the uncollectible accounts expense based on a percentage of electric sales revenues. The Consumer Advocate proposed an uncollectible accounts expense of $727,420 (CA-101, Schedule C-9, line 18) based on the average of the actual 12-month cumulative net write-off as of December 2002, December 2003, December 2004, December 2005 and December 2006.

The allowance for uncollectible accounts was not an issue in the DOD's testimony.

During the settlement discussions, HECO proposed an allowance for uncollectible accounts expense of $970,000. The $970,000 was calculated by HECO using five years of data (from July 2002 to June 2007, instead of the 10 years of data used in direct testimony) to calculate an estimated net write-off percentage for the test year of .0719% (see HECO T-8, Attachment 1 hereto), which was applied to revenues at present rates ($1,348,635,000 x .0719% = $970,000).

During the settlement discussions, the Parties could not reach agreement on the method of calculating the test year uncollectible accounts expense. For purposes of settlement, however, the Parties agree to reflect $970,000 as a fixed uncollectible accounts dollar expense amount, with no further adjustment for assumed increases in uncollectibles associated with interim rate increases or the proposed revenues arising from the present docket.

CUSTOMER SERVICE

11. Test year customer service expenses were estimated to be $7,176,000 in direct testimony, HECO T-9 (page 1, and HECO-901), which was increased by a net of $94,000 to an updated total of $7,270,000 in the Company's HECO T-9 June 2007 Update, page 3, filed on June 15, 2007. The Consumer Advocate recommended a test year expense estimate of $5,594,000, resulting in a reduction of $1,676,000 to the Company's June 2007 Update estimate. The adjustments proposed by the Consumer Advocate are comprised of the following:

- $101,000 (CA-101, Schedule C-10) for payroll expense,
- $641,000 (CA-101, Schedule C-11) for reclassification of DSM expenses, and
- $934,000 (CA-101, Schedule C-12) for informational advertising.

The DOD proposed no adjustments in this area.

As a result of the settlement discussions, the Parties agree to an adjustment of $1,562,000, as described below. A portion ($182,000) of the adjustment reflects the overhead costs (i.e., corporate administration, employee benefits, and payroll taxes) associated with the reclassification of DSM Program expenses, as discussed in subparagraph 11.b below. For purposes of this settlement, these overhead costs are spread to the appropriate accounts~~;~~: $36,000 to corporate administration (see subparagraph 12.i), $120,000 to employee benefits (see subparagraph 12.d), and $26,000 to payroll taxes (see paragraph 15). The remaining adjustment of $1,380,000 was applied to HECO's June 2007 Update (June 15, 2007, HECO T-9) estimate of customer service expense, resulting in a revised test year estimate of $5,890,000.

a. Payroll Expense Adjustment
In CA-T-1, the Consumer Advocate proposed a Customer Service labor expense reduction adjustment of $101,000 (CA-101, Schedule C-10). The proposed adjustment was based on the same average staffing methodology and rationale proposed for the T&D labor expense adjustment. During the settlement discussions, the Company provided information regarding specific positions that were filled in January of the 2007 test year. As a result, the Company proposed a lower adjustment, which was partially accepted by the Consumer Advocate. The accepted changes in the calculation of average employees decreased the Consumer Advocate's recommended expense reduction of employees from 2.5 to 2.0. For purposes of settlement, the Parties agree to a labor expense reduction of $85,000 (see HECO T-14, Attachment 1(A~~)~~) hereto).

b. DSM Program Expense Adjustment
In CA-T-1, the Consumer Advocate proposed a Customer Service expense adjustment of $641,000 (CA-101, Schedule C-11) to remove the test year proposed level of DSM Program Costs, other than the "CIDLC" and RDLC" load management programs, from base rates and recover such costs through the IRP Clause effective with the implementation of new base rates for HECO in this docket. The Company agreed with the Consumer Advocate's proposed recommendation to reclassify certain DSM labor costs to the IRP Clause, but proposed a smaller adjustment.

For purposes of settlement, HECO and the Consumer Advocate agree to an adjustment of $543,000, which includes $361,000 in labor and $182,000 of on costs as shown on HECO T-9 Attachment 8~~.~~ hereto. (The $182,000 of on costs includes $120,000 of Employee Benefits (HECO T-9 Attachment 8 hereto, Column "Emp Ben", Row 32, and subparagraph 12 d, below, Employee Benefits), $36,000 of Corporate Administrative Expenses (HECO T-9 Attachment 8 hereto, Column "Corp Adm", Row 32, and subparagraph 12.i, below, Corporate Administration), and $26,000 of Payroll Taxes (HECO T-9 Attachment 8 hereto, Column "PR taxes", Row 32, and paragraph 15, below, Payroll Taxes.)) These costs will need to be recovered prospectively through the DSM component of the IRP cost recovery provision ("DSM Surcharge") effective with the implementation of new rates in this Docket and continuing beyond the transition date (in or about January 2009) to be identified by the Commission in the docket it intends to open to transition DSM programs to a non-utility market structure so as to track actual HECO expenses changing as a result of such market structure. The DSM Surcharge, through which the public benefits fund will be collected, will be administered by the utility and the extent to which HECO resources are required to administer the fund or to ensure a smooth transition, as required by Decision and Order No. 23258, to a non-utility structure is presently unknown. The Consumer Advocate understands that transition issues may be encountered that will impact the timing of the actual HECO labor cost reductions arising with third party administration. The difficulty in predicting future needs for HECO assistance during transition is why the Consumer Advocate believes that surcharge recovery is important at this time, to provide flexibility and more precise regulatory accounting and recovery of actual costs that are expected to change in the future. The Department of Defense has not proposed any adjustments in this area.

In the June 2007 Update for HECO T-9, HECO increased labor cost by $75,000 associated with the addition of two regular HECO employees (CEP Analyst and C&I Engineer) into base rates. (See June 2007 Update (June 15, 2007), HECO T-9, pages 1 and 3.) Inclusion of these employees in base rates was based on the EE Docket D&O (Docket No. 05-0069, Decision and Order No. 23258, issued February 13, 2007, pages 51 and 144), which states, "…labor costs shall be recovered through base rates and all other DSM-related utility-incurred costs shall be recovered through a surcharge." The Consumer Advocate proposed that the labor expenses for these two employees be reclassified to be recovered in the IRP Clause. The Company accepts the Consumer Advocate's recommendation for purposes of settlement and has reclassified the labor associated with these two employees to be recovered through the IRP Clause as discussed above. The Department of Defense has not proposed any adjustments to the Company's proposal.

c. Informational Advertising Expense

In CA-T-1, the Consumer Advocate proposed a reduction in test year informational advertising of $934,000 (CA-101, Schedule C-12). The Consumer Advocate contends that such increased advertising spending has not been proven to be necessary or cost-effective. The Department of Defense did not propose any adjustment in this area.

As part of the overall settlement on revenue requirements, HECO has accepted the Consumer Advocate's recommendation.

ADMINISTRATIVE AND GENERAL (A&G)

12. Test year A&G expenses were estimated to be $72,007,000 in direct testimony, HECO T-10 (page 2), which was increased by a net of $3,779,000 to an updated total of $75,786,000 in the Company's ~~HECO T-10~~ June 2007 Update~~, filed on~~ (Supplemental Filing (July 23, 2007), HECO T-10, Attachment 1, page 3). The Consumer Advocate recommended a test year expense estimate of $68,555,000 (CA-101, Schedule C, page 1, line 13), resulting in a reduction of $7,231,000 to the Company's June 2007 Update (Supplemental Filing (July 23, 2007), HECO T-10, Attachment 1, page 3) estimate. The adjustments proposed by the Consumer Advocate are comprised of the following:

- $596,000 (CA-101, Schedule C-16 and C-17) for payroll expense,
- $330,000 (CA-101, Schedule C-20) for Public Affairs consultant and service and community process activities,
- $535,000 (CA-101, Schedule C-21) to normalize the costs for the Ellipse Migration,

- $254,000 (CA-101, Schedule C-22) to reflect the Employee Benefits associated with the recommended labor adjustments proposed in Schedules C-16 and C-17,
- $(2,000) (~~Schedule~~see discussion in subparagraph 7.g above and CA-101, Schedule C-19) to normalize the abandoned project costs,
- $375,000 (CA-101, Schedule C-14) to normalize the R&D expense,
- $88,000 (~~Schedule~~see discussion in subparagraph 7.f above and CA-101, Schedule C-15) to remove the expiring MINCOM amortization, and
- $5,055,000 (CA-101, Schedule C-18) to remove the amortization of the pension asset.

As a result of the settlement discussions, the Parties agree to a revised test year estimate of $69,187,000, which is $6,599,000 less ~~the~~than HECO's June 2007 Update (Supplemental Filing (July 23, 2007), HECO T-10) estimate (of $75,786,000) and reflects the settlement of these nine issues as described below, as well as the removal of corporate administration and employee benefits expenses (see subparagraphs 12.i ~~and~~and 12.d, respectively) associated with the reclassification of DSM Program expenses for the six Customer Service employees removed from base rates (to be recovered through the IRP Clause (see paragraph 11 and subparagraph 11.b).

a. Payroll Expense Adjustments for A&G Accounts

The Consumer Advocate initially proposed A&G labor expense adjustments of $596,000 (CA-101, Schedules C-16 and C-17) in CA-T-3. The proposed adjustments were based on the same methodology and rationale for the proposed T&D Payroll Expense Adjustment (CA-101, Schedule C-13) and were based on the average of the beginning of year actual A&G employees (December 31, 2006) and HECO's end of year forecast (December 31, 2007) employee levels.

During the settlement discussions, the Company noted and the Consumer Advocate agreed that the proposed $108,660 adjustment to reduce the labor expenses for Responsibility Area ("RA") PNP, Regulatory Affairs should not be included. Because the Company had already reflected an increase of staff positions occurring in the middle of the test year, test year labor expenses were estimated for a test year average employee count identical to that calculated by the Consumer Advocate (see HECO T-14, June 2007 Update, revised 6/29/07, page 3 of 4). As a result, no difference exists between the Consumer Advocate's and HECO's estimates of average test year employee counts for RA "PNP" and the $108,660 labor expense adjustments proposed by the Consumer Advocate in C-16 is not required (see HECO T-14, Attachment 1(C~~)~~) hereto).

HECO also provided information regarding the positions that were filled in January of the test year by employees or HECO temporary employees and outside contractors for the other RAs. The Company proposed adjustments to reduce the adjustments proposed by the Consumer Advocate in CA-101, Schedules C-16 and C-17. Based on the information provided, the Consumer Advocate acknowledged the Company's claim that the average employees using the updated information decreased the Consumer Advocate's recommended reduction of employees in CA-101, Schedule C-16 from 14.5 to 7.0, and in CA-101, Schedule C-17 from 3.0 to 2.0, but did not concur with the other representations of the Company. For purposes of settlement, the Parties agree to a total A&G labor reduction of $232,000 (as opposed to the $487,340 adjustment proposed by the Consumer Advocate in CA-101, Schedules C-16 and C-17) (see HECO T-14, Attachments 1(C) and 1(D~~)~~) hereto).

b. Public Affairs

In direct testimony, HECO included in its test year estimate for outside services general (Account 921) costs of $660,000 for Public Affairs consultant, specific service and community process activities. (See HECO-WP-101(G), page 953.) The Consumer Advocate (CA-101, Schedule C-20) and the DOD (DOD-117) recommended a downward adjustment of $330,000 or one-half of the Company's test year estimate.

For purposes of settlement, the Parties agreed on the test year estimate of $570,000, reflected a decrease of $90,000 for outside services general (Account 921). (The $570,000 is the sum of the $330,000 (which is one-half of the Company's estimate of $660,000) and the projected costs of $240,000 for the Company's two critical projects that are explained below.) As a condition to this agreement, the Company agrees to provide the Consumer Advocate with documentation by January 31, 2008 (i.e., presumed to be prior to the issuance of a final decision and order) that the additional $240,000 for Company's two critical projects (greenhouse gas emission research project and seabird mitigation measures) was actually spent in 2007 and that the Company's 2007 expenditures in this area will approximate $750,000[4], including the $240,000. (See Supplemental Information, HECO T-10, Attachment 3 hereto, for further discussion on the Company's two critical projects.)

c. Ellipse Migration

The Company's test year estimate for the non-labor Ellipse Unix migration costs increased from $509,000 (See HECO T-10, page 21) to $854,000 as presented in HECO's responses to CA-IR-392, CA-IR-438 and CA-IR-440. The Consumer Advocate proposes to "normalize" the Ellipse Unix Migration cost for 2007 over three years, resulting in a downward adjustment of $535,000~~(~~. See CA-101, Schedule C-21~~)~~. The DOD did not propose any adjustment in this area.

For purposes of settlement, the Company agrees to reduce the Ellipse Unix Migration costs included in the test year by $535,000 as proposed by the Consumer Advocate, resulting in a normalized test year estimate of $319,000 ($854,000 minus $535,000).

d. Employee Benefits

[4] The Company clarified with the Consumer Advocate that it expects to spend approximately $750,000 in 2007 in this area.

HECO's test year estimate for employee benefit expenses (Account Nos. 926000 and 926010) is $27,636,000, as presented in HECO-1201. The Company's estimated employee benefit expenses for the test year was increased by $3,654,000 for an updated total of $31,290,000. See HECO's June 2007 update (Supplemental) (June 25, 2007) for HECO T-12 (Exhibit 1).

In Exhibit CA-101, Schedule C-22, the Consumer Advocate proposed to reduce HECO's revised forecast of employee benefit expenses by $254,000 to reflect the employee count reduction proposals made for the T&D, Customer Service, and other departments that charge to A&G accounts. Based on the Parties' agreement on the test year headcount reduction of 22, associated employee benefits are reduced by $103,000 in Account No. 926010, which was accepted by the Parties for purposes of settlement (see HECO T-14, Attachment 1(E~~)~~) hereto). In addition, HECO's estimate for employee benefits expenses is reduced by $120,000, to reflect the reclassification of DSM Program expenses for the six Customer Service employees removed from base rates (to be recovered through the IRP Clause) as discussed in paragraph 11 and subparagraph 11.b. This reduction is agreed to by the Parties. (See HECO T-9, Attachment 8 hereto, Column "Emp Ben", Row 32.)

e. Abandoned Project Costs

As discussed in subparagraph 7.g. above, for purposes of settlement, the Parties agree on the test year estimate for abandoned project costs of $130,000, as shown on HECO T-10, Attachment 1 hereto, which provides the allocation of abandoned costs by block of accounts.

f. Miscellaneous Administrative and General (A&G) Expenses

Test year miscellaneous A&G expenses were estimated to be $7,487,000 in direct testimony (HECO T-13, page 1, and HECO-1301), which was increased by a net $195,000 to an updated total of $7,682,000 in the Company's HECO T-13 June 2007 Update, filed June 15, 2007. In direct testimony, the Consumer Advocate proposed adjustments of $375,000 (CA-101, Schedule C-14) for research and development ("R&D") and $88,000 for expiring MINCOM software amortization expenses as discussed in subparagraph 7.f. above. The DOD also proposed adjustments of $375,000 to reduce R&D expenses and $61,000 for Edison Electric Institute Membership dues. As a result of the settlement discussions, all Parties agree to a revised estimate of $7,239,000 for Miscellaneous A&G expenses, which includes the settlement of these three issues as described below.

R&D

In the Company's direct testimony, HECO T-13, R&D expenses were estimated at $2,591,000 for EPRI dues and multiple R&D projects ($2,591,000 is equal to the sum of "R&D" costs of $2,064,000 and "Develop & Demonstrate New Technology" costs of $527,000 shown in HECO-1304 of HECO T-13 direct testimony). This amount was increased by $173,000 to a total of $2,764,000 in the Company's June 2007 Update (June 15, 2007, HECO T-13, page 7, revised

HECO-1304). Both the Consumer Advocate and DOD did not propose any adjustment to the EPRI dues of $1,608,000 in the test year. However, for the non-EPRI R&D project amount, the Consumer Advocate and DOD proposed a "normalization" adjustment of $375,000 based on a three year average (including the test year) of R&D expenses (CA-101, Schedule C-14 and DOD T-1, page 47). During the settlement discussions, the Company provided further information (see HECO T-13, August 2007 Supplement, Attachment 1) to support its proposed non-EPRI R&D expense projection of $1,156,000 ($2,764,000 less $1,608,000). For purposes of settlement, the Company proposed a total reduction of $300,000 based on projected expenditures for R&D in 2007, for a revised total of $856,000 for non-EPRI R&D projects in the test year (see HECO T-13, Attachment 2 hereto). The Company also agrees to provide the Consumer Advocate with copies of the co-funding agreement with EPRI and its co-matching check to support the biofuels crop study that the Hawaiian Agriculture Research Center would oversee. [A copy of the co-funding agreement and the co-matching check is provided as Supplemental Information, HECO T-13, Attachment 4 hereto.] Furthermore, the Company agrees to spend at least the amount of EPRI dues ($1,608,000) plus the non-EPRI R&D amount ($856,000) on a recurring annual basis. Based on the above, the Consumer Advocate and DOD accept the Company's proposal.

Expiring Software Amortization

As discussed in subparagraph 7.f. above (and CA-101, Schedule C-15), the Parties' differences with respect to the inclusion of the MINCOM amortization has been settled. Based on the settlement, the Company agrees to remove the MINCOM amortization expenses allocated to Miscellaneous A&G expenses~~).~~ [of $88,000. See Supplemental Information, HECO T-13, Attachment 3 hereto].

EEI Membership Dues

The Company estimated EEI dues of $198,000 in direct testimony, HECO T-13 (page 16-17, and HECO-1304, page 5). This estimate excluded a portion of the EEI dues that related to government lobbying, based on information provided by EEI on its 2006 invoices. DOD proposed an additional exclusion of $61,000, calculated on a larger exclusion percentage (DOD-115). This larger percentage was based on the amounts EEI spent on legislative and regulatory advocacy, advertising, marketing, and public relations activities in 2005. The proposed exclusion percentage was adopted by the Arkansas Public Service Commission in Docket No. 06-101-U. The Company did not accept the DOD's proposal but, for settlement purposes, agrees to exclude an additional $37,000, based on the percentage of EEI's 2006 expenditures for legislative advocacy, legislative policy research, advertising, marketing, and public relations (see HECO T-13, Attachment 1 hereto, page 2). The DOD and Consumer Advocate accept the Company's proposal.

g. Pension Tracking Mechanism

As a result of the settlement reached between HELCO and the Consumer Advocate regarding the implementation of a pension tracking mechanism for HELCO in Docket No. 05-0315 (HELCO's 2006 test year rate case), HECO proposed a pension tracking mechanism in the instant proceeding. ~~(~~See June 2007 Update (June 27, 2007), HECO T-10 Attachment 8~~, filed on June 27, 2007.)~~ .

Although HECO and the Consumer Advocate agree to implementation of a pension tracking mechanism, the Consumer Advocate disagrees with HECO's proposal to include the amortization of the test year pension asset balance (resulting in an expense $5,055,000) in test year revenue requirements (CA-101, Schedule C-18). The DOD objects to the implementation of a pension tracking mechanism. (See DOD T-1, pages 53-55.) Further, the DOD also objects to HECO's proposed inclusion of amortization of test year ending pension ~~asst~~ asset of $5,055,000 in test year revenue requirements. (See DOD T-1, pages 31-33 and DOD-114.)

For purposes of settlement, the Parties agree to a pension tracking mechanism that does not include the amortization of the pension asset as part of the pension tracking mechanism in this proceeding. Not including the amortization has the effect of deferring the issue of whether the pension asset should be amortized for rate making purposes to HECO's next rate case. In addition, under the tracking mechanism, HECO would only be required to fund the minimum level required under the law, until the existing pension asset amount is reduced to zero, at which time the Company would fund NPPC as specified in the pension tracking mechanism for HELCO.[5] If the existing pension asset amount is not reduced to zero by the next rate case, the Parties would address the funding requirements for the pension tracking mechanism in the next rate case. Furthermore, the pension tracking mechanism will require the Company to create a regulatory asset or regulatory liability, as appropriate, for the difference between the amount of NPPC included in rates and actual NPPC recorded by the Company. See HECO T-10, Attachment 2 hereto for the agreed upon pension tracking mechanism.

h. OPEB Tracking Mechanism

In this proceeding, HECO proposed an OPEB tracking mechanism. ~~(~~See June 2007 Update (June 27, 2007), HECO T-10, Attachment 9~~, filed on June 27, 2007.)~~. HELCO and the Consumer Advocate previously agreed to the implementation of an OPEB tracking mechanism for HELCO in Docket No. 05-0315 (HELCO's 2006 test year rate case).

[5] This provision is different from the tracking mechanism that was agreed to for the pending HELCO rate case due to different fact and circumstances. In the HELCO rate case, the Parties were in agreement as to the inclusion of the pension asset in rate base and the amortization of the pension asset balance at the end of the test year. In the current HECO rate case, the Parties disagree as to whether the pension asset should be included in the test year rate base, as well as whether said balance should be amortized for rate making purposes. The issue as to whether such amortization should be recognized in the test year revenue requirement has been deferred to HECO's next rate case.

The Consumer Advocate indicated that the OPEB tracker was a non-event in the ~~HELCO~~HECO rate case. The DOD objected to the implementation of an OPEB tracking mechanism.

For purposes of settlement, the Parties agree to HECO's proposed OPEB tracking mechanism. The implementation of the OPEB tracking mechanism does not impact the test year revenue requirements in this case.

i. Corporate Administration
HECO's estimate of A&G expenses was reduced by $36,000, to remove the corporate administration expenses associated with the reclassification of DSM Program expenses for the six Customer Service employees removed from base rates (to be recovered through the IRP Clause) as discussed in paragraph 11 and subparagraph 11.b. This reduction is agreed to by the Parties. (See HECO T-9, Attachment 8 hereto, Column "Corp Adm", Row 32.)

DEPRECIATION AND AMORTIZATION

13. The Company's test year estimate of depreciation expense submitted in direct testimony was $79,736,000. (See HECO T-13, page 27.) With the update of actual plant additions in 2006, including updates to the historical 5-year averages for retirements, cost of removal and salvage, test year depreciation expense was adjusted by $973,000 to $78,763,000. The updated test year accumulated depreciation end of year balance increased by $3,652,000 from $1,188,793,000 to $1,192,445,000 due to lower 2006 plant retirements of approximately $3,400,000 and updated averages with the inclusion of 2006 recorded data ~~(see~~. See June 2007 Update (June 15, 2007), HECO T-13 (pages 11-23 updating HECO-1308 through 1311 and HECO WP-1301 through WP-1305). The Consumer Advocate and DOD accept the Company's updated estimates.

TAXES OTHER THAN INCOME TAXES

14. Revenue Taxes
In the settlement process, HECO suggested that the Consumer Advocate's test year estimate of taxes other than income taxes might be understated due to revenue tax expenses not being included for the 2005 test year rate case interim rate increase revenues (CA-101, Schedule C-2), and for only a portion of the interim surcharge revenues for DG fuel and trucking and LFSO trucking. The Consumer Advocate confirmed this error and the Parties agree that a correction was needed to add revenue taxes for the entire $57.2 million of the interim rate increase and surcharge revenues, increasing the Consumer Advocate's test year revenue tax expenses at current effective rates by $4,928,000. (Based on revenue tax factor of 8.885%, revenue taxes on $57,241,000 are $5,086,000 or $4,927,000 more than the Consumer Advocate's $158,000 adjustment shown in CA-101, Schedule C, page 2, line 18, Adjustment C-2.)

15. Payroll Taxes

The Consumer Advocate and HECO have calculated a reduction to HECO's estimate of payroll taxes associated with the average test year employee labor expense reductions made for the T&D, Customer Service, and other departments that charge to A&G accounts. Based on the estimated total test year average employee count reduction of 22, payroll taxes are reduced by $46,000 (see HECO T-14, Attachment 1(F~~)~~) hereto, page 1). In addition, HECO's estimate of Payroll Taxes was reduced by $26,000, to reflect the reclassification of DSM Program expenses for the six Customer Service employees removed from base rates (to be recovered through the IRP Clause) as discussed in paragraph 11 and subparagraph 11.b. (See HECO T-14, Attachment 1(F) hereto, page 1. See also HECO T-9, Attachment 8 hereto, Column "PR Taxes", Row 32.) For settlement purposes, the Consumer Advocate and DOD accept these adjustments.

16. Interest Synchronization
The DOD proposed an adjustment for interest synchronization to determine the interest deduction for the calculation of test year income tax expense. See Exhibit DOD-118. HECO did not agree with this proposal and did not use interest synchronization to develop its revenue requirements for the test year. The Parties took the same positions in Docket No. 04-0113 (HECO 2005 test year rate case). The Parties agreed that the final decision and order in Docket No. 04-0113 ~~will~~would determine whether interest synchronization will be used for that proceeding. For purposes of settlement, the Parties agreed to not relitigate the issue in this docket, that HECO's method of computing interest expense for the purposes of determining income taxes for the 2007 test year ~~will~~would be used in calculating the interim rate increase (as it was in Interim Decision and Order No. 22050 in Docket No. 04-0113), and that the interest synchronization methodology issue ~~will~~would be determined by the final non-appealable decision in Docket No. 04-0113. As a result, the Parties agree to waive evidentiary hearings and proposed findings of fact and conclusions of law with respect to this issue. [On October 25, 2007, the Commission issued its Amended Proposed Decision and Order No. 23768 in Docket No. 04-0113, in which it ruled that HECO was not required to use interest synchronization to calculate its interest expense and that HECO's proposed interest expense was reasonable. Amended Proposed Decision and Order No. 23768, pages 18-22 and 98. On October 31, 2007, the DOD filed its Exception to Amended Proposed Decision and Order No. 23768. On March 4, 2008, the Commission issued Order No. 24068 adopting interest synchronization as the mechanism for computing interest expense in the HECO 2005 test year rate case (Docket No. 04-0113). The Company incorporated the adjustment for the interest synchronization in HECO's Motion to Adjust Interim Increase, filed in this proceeding on May 21, 2008. By Order issued on June 20, 2008, the Commission approved HECO's adjusted 2007 test year rate case interim increase of $77,867,000 over revenues at final rates implemented in Docket No. 04 0113.]

RATE BASE

17. In direct testimony, HECO T-17, page 1, and HECO-1701, the Company estimated the test year average rate base at $1,214,313,000. Subsequently, this estimate was updated to

$1,201,212,000 (June 2007 Update ~~(~~Supplement (July 25, 2007), HECO T-17~~)~~ and the response to DOD-IR-96, page 2 (updating HECO-1701)), based on updated rate base component amounts such as the replacement of 2006 year-end estimates with recorded amounts, inclusion of the Asset Retirement Obligation regulatory asset, and changes to working cash. The Consumer Advocate and DOD accepted the Company's test year average rate base estimate except for three items: 1) inclusion of the pension asset and the related component of accumulated deferred income taxes ("ADIT") (CA-101, Schedule B-2); 2) the estimate of cash working capital (CA-101, Schedule B-3); and 3) an element of ADIT related to AFUDC in Construction Work in Progress ("CWIP") (CA-101, Schedule B-5). In addition, the Consumer Advocate did not accept the Company's fuel inventory estimate, based on slight differences in the results of its production simulation model with respect to the LSFO burn rate (CA-101, Schedule B-4). Based on these differences, the Consumer Advocate's estimate of the test year average rate base was $1,156,048,000 (CA-101, Schedule B) and DOD's estimate was $1,150,720,000 (DOD-103). As discussed below, for purposes of settlement, the Parties agree to the cash working capital, the ADIT component related to CWIP and fuel inventories. The Parties have not reached agreement on whether the Pension Asset should be included in rate base, but ~~agree~~agreed that related ADIT should be excluded from rate base if the Pension Asset is excluded from rate base, and that the Pension Asset will not be included in rate base for purposes of the interim increase (pending issuance of a final decision and order in Docket No. 04-0113).

18. Fuel Inventories
Test year fuel inventory was $52,706,000 in direct testimony (HECO T-4, page 2) and updated to $53,084,000 in HECO T-4 June 2007 Update (Filed June 15, 2007. See also response to CA-IR-214, page 18, updating HECO-408). For purposes of settlement, the Consumer Advocate and the DOD accept HECO's average test year balance of $53,084,000 as shown in HECO T-17 June 2007 Update (June 29, 2007, page 7). HECO's test year estimate is based on the updated production simulation results provided in response to CA-IR-214 and HECO T-4 June 2007 Update (June 15, 2007).

19. Materials and Supplies Inventory
The Parties are in agreement with HECO's Production inventory of $6,678,000 and T&D inventory of $6,160,000 and the Company's $12,838,000 average Materials and Supplies inventory as shown in HECO-1703 in direct testimony.

20. Pension Asset

HECO proposed to include $59,405,000 of pension asset in the test year average rate base. (See June 2007 Update (June 29, 2007), HECO T-17, page 7; and response to DOD-IR-96, page 2, updating HECO-1701). The portion of the Accumulated Deferred Income Taxes (ADIT) related to the pension asset amounts to $23,114,000 (calculated as the average of the beginning year balance shown in HECO's response to CA-IR-136 and the revised year-end balance shown in HECO's reponse to CA-IR-441). The Parties agreed that the exclusion of all or a portion of the pension asset in rate base will also require corresponding adjustment to ADIT.

The Consumer Advocate and the DOD oppose the inclusion of HECO's pension asset in rate base in this proceeding. Whether a pension asset[6] should be included in rate base is an issue in HECO's 2005, test year rate case (Docket No. 04-0113). In Interim Decision and Order No. 22050, the Commission found that HECO was probably entitled to include its pension asset in rate base. The Commission noted, however, that its decisions and rulings in the Interim Decision and Order were subject to a more detailed review and analysis, including a review of the Parties' post-hearing briefs. As a result, the Commission will make a determination on that issue in the final decision and order in Docket No. 04-0113 based on the record in that proceeding.

The Parties are unable to reach agreement on this issue. The Parties agree to address the issue in their respective proposed findings of fact and conclusion of law and responses to proposed findings of fact and conclusions of law, based on the record in this proceeding. In addition, the Parties agree to incorporate by reference the record on this issue from Docket No. 04-0113. The Parties also agree that further examination of the issue at an evidentiary hearing is unnecessary, and the Parties waive their rights to a hearing on this issue.

For purposes of an interim decision in this proceeding, the Parties agree to exclude the pension asset and related ADIT from rate base.

[Update: On May 1, 2008, the Commission issued Decision and Order No. 24171 in Docket No. 04-0113 (HECO's 2005 test year rate case) which stated that based on the facts presented in that docket, HECO shall not include $78,791,000 of its prepaid pension asset, net of an adjustment to ADIT reserve of $28,483,000, in its rate base.]

21. Accumulated Deferred Income Taxes

In its direct testimony (HECO T-15, page 21), the Company proposed an average balance of $155,081,000 for accumulated deferred income taxes ("ADIT") in the 2007 test year. In its June 2007 ~~Supplemental update for~~Update Supplement (July 25, 2007), HECO T-15, (page 8, updating HECO-1505), the Company reduced its test year estimate of the ADIT average balance to $146,062,000. Both the Consumer Advocate (CA-101, Schedule B-5) and DOD (Exhibit DOD-110) proposed an adjustment of $8,157,000. This adjustment was intended to reverse an adjustment made by HECO in its June 2007 Update ~~for~~(June 29, 2007), HECO T-15, that eliminated from rate base the deferred taxes associated with AFUDC in CWIP.

For purposes of settlement, the Parties accepted the Company's proposed option to include in rate base the deferred taxes related to both the AFUDC in CWIP and tax

[6] The pension amount in rate base was referred to as "prepaid pension asset" in Docket No. 04-0113; however, with the adoption of FAS 158, the amount is now referred to as "pension asset."

capitalized interest "TCI", under the condition that the entire balance of the Regulatory Asset for AFUDC Equity Gross Up and the related deferred taxes also be included in rate base (thus eliminating HECO's proposed adjustment to this Regulatory Asset). This option results in a $5,524,227 reduction to rate base as shown in HECO T-15, Attachment 1 hereto. See also the Pension Asset section above that discusses the agreed upon exclusion of the ADIT related to pension asset of $23,114,000 from rate base if the pension asset is excluded from rate base.

22. Working Cash

The Parties agreed on the items included in the working cash calculation and the revenue and payment lag days except as described below:

a. Pension Asset Amortization – The Company had proposed the inclusion of pension asset amortization in the working cash calculation (see HECO's June 2007 Update (June 29, 2007), HECO T-17, pages 3 and 12); however, as a result of the removal of pension asset amortization from revenue requirements in this rate case as discussed above, there is no issue with respect to the working cash relating to the pension asset amortization.

b. Pension Expense – The Company's original position was that with the pension asset included in rate base (and prior to the consideration of a pension tracking mechanism), the pension expense should be included in the working cash calculation with a revenue collection lag of 37 days and a payment lag of zero days based on the inclusion of the pension asset in rate base. (See HECO-1706 and HECO WP-1706, page 32.) The Company's position on payment lag days was increased to 14 days based on implementing the pension tracking mechanism which required NPPC funding (with certain exceptions) and the expectation that pension funding under the pension tracking mechanism would be at the end of each month. (See June 2007 Update, HECO T-17 (June 29, 2007), pages 2-3 and the Company's response to DOD-IR-100, page 9.) The Consumer Advocate objected to the inclusion of pension expense in the working cash calculation absent plans or a study specifically analyzing pension cash flows. (See CA T-3, pages 100-101.) Acknowledging that the Company does not have specific data on which to base its pension payment lag study, the Company subsequently proposed to increase the payment lag for pension expense from 14 days to 30 days (the payment lag days for "other" O&M non-labor items). The DOD proposed that the pension expense be included in the working cash with 182.5 payment days based on an assumption that HECO would not be contributing to the pension fund in the test year and with no pension asset in rate base. (See DOD T-1, page 18.) For purposes of settlement and with the acknowledgement that settlement on this item does not reflect any party's position on the inclusion of pension asset in rate base, the Parties agree to excluding pension expense from the working cash calculation.

c. Amortization Expenses – The Company's position was that these items were paid for in advance of the expense recognition and have zero or negative payment lags or should be included as rate base items. However, the Company proposed to apply the "other" non-labor O&M payment lag day to these items, in recognition of the fact that the Company has not done an extensive search for all amortization items. (See response to DOD-IR-100, page 2.) The Consumer Advocate and the DOD proposed that amortization expenses (system development costs, regulatory commission expense, Waiau water well, Kahe Unit 7) should be removed from the working cash calculation on the basis that these are non-cash transactions. (See CA T-3, pages 99-101, DOD T-1, pages 19-20, and DOD-109, page 2.) For purposes of settlement, the Parties agree to the inclusion of other amortization items in the working cash calculation with a 30 day payment lag.

The revised O&M non-labor payment lag days estimate, as a result of incorporating the above discussed items, is 34 days. (See HECO T-17, Attachment 1 hereto.) Other differences in the working cash resulted from differences in the related expense items. For purposes of settlement, the Parties agree to the O&M non-labor payment lag days of 34 (see HECO T-17, Attachment 1 hereto) and to the exclusion of pension expense from O&M non-labor in the calculation of working cash.

COST OF CAPITAL

23. Capitalization

HECO proposed the following capitalization amounts and weights:

	–HECO T-19, Attachment 5 hereto & HECO-1901 Direct Testimony	
	Amounts ($000)	Weights (%)
Short-term borrowing	38,971	3.08
Long-term borrowing	480,727	38.01
Hybrid securities	27,556	2.18
Preferred stock	20,586	1.63
Common stock	696,825	55.10

The Consumer Advocate agreed to utilize the capital structure proposed by HECO. (See CA-T-4, page 3.)

The DOD proposed a test year capital structure based on the average actual quarter-end capitalization for 5 quarters beginning with quarter-end March 2006 and ending with quarter-end March 2007. (See DOD T-2, page 26 and DOD-205.)

For purposes of settlement, the Parties agree to the capital structure proposed by HECO.

24. Cost of Capital. There were no differences between HECO, the Consumer Advocate and the DOD with respect to the cost rates for short-term debt, long-term debt, hybrid securities and preferred stock. (See HECO-1901, CA-413 and DOD-215, page 1.) The weighted earnings requirement for short-term debt, long-term debt, hybrid securities and preferred stock is the same for HECO and the Consumer Advocate. (See HECO-1901, CA-T-4, page 3 and CA-413.) The DOD's weighted earnings requirement for short-term debt, long-term debt, hybrid securities and preferred stock differed due to the DOD's proposed capitalization. (See DOD-215, page 1.) For purposes of settlement, the Parties agree to the capital structure as discussed above, therefore there are no differences related to the weighted earnings requirements for short-term debt, long-term debt, hybrid securities and preferred stock.

25. Return on Common Equity and Composite Cost of Capital
In HECO's 2007 test year rate case direct testimony, HECO recommended a rate of return on common equity of 11.25% in direct testimony.[7] (See HECO T-19, page 56.) This resulted in an overall cost of capital of 8.92%. (See HECO-1901.) The Consumer Advocate proposed that the cost of common equity for HECO is within a broad range of 9.00% to 11.00%, but proposed to use the middle portion of this range and thus recommended a range of 9.50% to 10.50% for the rate of return on common equity. (See CA-T-4, page 3.) This resulted in an overall cost of capital in the range of 7.96% to 8.51% (8.23% mid-point which incorporates a cost of common equity of 10.00%). (See CA-T-4, pages 4-5.) The Consumer Advocate's specific cost of capital recommendation for HECO was 8.23%. (CA-T-4 at 4, l.24 to 5, l.6.) The DOD estimated a range for the rate of return on common equity (9.00% to 9.75%), with a mid-point of 9.375% and a specific cost of equity recommendation of 9.25%. (See DOD T-2, pages 2 and 40-41.) The 9.25% applied to the DOD's proposed capitalization for HECO produced a cost of capital of 7.70%. (See DOD T-2, page 2.)

For the purpose of reaching a global settlement in this rate case, HECO, the Consumer Advocate and the DOD agree on a rate of return on common equity of 10.7% for the test year. This results in a composite cost of capital of 8.62%. See HECO T-19, Attachment 5 hereto.

COST OF SERVICE/RATE INCREASE ALLOCATION/RATE DESIGN

Below are the agreements that HECO, the Consumer Advocate and the DOD have reached on cost of service/rate design issues.

26. Cost of Service Study

HECO provided its embedded cost of service study in direct testimony (HECO T-20, pages 1-13 and HECO-2001 through HECO-2011) based on a cost classification methodology previously approved by the Commission. The Consumer Advocate

[7] In the settlement negotiations, the Company also provided supplemental information regarding its credit ratings. See August 2007 Supplement for HECO T-19 for the supplemental information.

proposed to change the classification of certain distribution costs from customer-related to demand-related costs (CA-T-5, pages 12-28), and proposed to change the classification of some non-fuel production O&M expenses from a demand to an energy classification (CA-T-5, pages 28-31). However, the Consumer Advocate indicated that it would not be unreasonable for the Commission to also consider the HECO approach using methods previously accepted by the Commission. (See CA-T-5, page 34.) The DOD witness reviewed the principal separations of costs between fixed and variable and reviewed the fixed costs between demand-related and customer-related costs and concluded that the HECO cost of service study uses reasonable methods. (See DOD T-3, page 9.)

For settlement purposes in this case:

1) The Parties concur that agreement on a cost of service methodology is not a requirement to settle the case. The agreements on revenue allocation and rate design presented below are reasonable given the results of both HECO's and the Consumer Advocate's proposed cost of service methodologies;

2) HECO agrees in its next rate case to present a cost of service study utilizing the same distribution classification methodology as it used in this case, as well as a cost of service scenario that classifies all distribution network costs (poles, conduits, lines, and transformers investment and expenses) as demand-related. HECO can present other cost of service scenarios, if desired, and make whatever recommendations it chooses regarding interpretation and utilization of cost of service evidence; and

3) HECO agrees to conduct studies designed to isolate the demand (fixed) versus energy (variable) elements of its non-fuel production O&M expenses for use in the next HECO rate case, to be included in all of HECO's cost of service scenarios.

27. Inter-Class Allocation of Rate Increase

HECO proposed to assign the same percentage revenue increase to each rate schedule. (See HECO T-1, page 31.) The Consumer Advocate also proposed that the rate increase should be implemented as an equal percentage increase among rate classes, given its proposed size of revenue increase and in consideration of customer impacts as well as the cost of service study results. (See CA-T-5, pages 36-39.) The DOD recommended that any approved rate increase be allocated among customer classes, viewing Schedule PS, Schedule PP, and Schedule PT as a single Schedule P class, with the objective of reducing the existing interclass subsidies. (See DOD T-3, page 20.)

For settlement purposes, the Parties agree to allocate any interim or final increase in electric revenues to rate classes in the percentages shown in HECO T-20, Attachment 1 hereto. This settlement considers the positions of HECO, the Consumer Advocate, and the DOD on cost of service and movement of inter-class revenues towards the respective cost of service positions.

The Parties further agree that Schedule P electric revenues established by this allocation will be further adjusted in the following amounts for the Schedule PP billing credit described in the Rate Design section below: Schedule PP revenues will be decreased by approximately $2.5 million, Schedule PS revenues will be increased by approximately $2.2 million, and Schedule PT revenues will be increased by approximately $0.3 million, as shown in HECO T-20, Attachment 1 hereto.

The Parties agree that the effect of the stipulated revenue increase allocations, Schedule PP billing credit, and Schedule PS, Schedule PP, and Schedule PT revenue adjustments will be reflected in the approved interim rate increase as follows: Since the interim rate increase will be implemented as a percentage applied to base revenue charges, similar to the implementation of the interim rate increase approved in HECO's test year 2005 rate case, HECO will make the appropriate billing system adjustments to apply a different percentage interim rate increase to Schedule PP customers that are directly served by a dedicated substation and to those that are not, in order to implement the effect of a $3.25 per kW credit and the stipulated revenue adjustments to Schedule PS, Schedule PP, and Schedule PT.

28. Intra-Class Rate Design

The Company's rate design proposal included customer charges based on the settlement agreement in the test year 2005 rate case, a Schedule R inclining block rate design, and increases to proposed commercial demand and energy charges based on the HECO cost of service study and the HECO proposed revenue requirement. (See HECO T-20, pages 14-15.) The Consumer Advocate proposed that HECO retain the existing residential single phase minimum charge (CA-T-5, pages 41-42) while agreeing with the Company's proposed customer charges (CA-T-5, page 42).

The Consumer Advocate recognized that HECO's demand charges represent only a fraction of full unit demand cost, but recommended that demand charges be adjusted upwards more gradually than the Company proposal so as to mitigate rate impacts on low load factor customers. (See CA-T-5, page 43.) The Consumer Advocate recommended that demand charges increase no more than 10% above those agreed upon in the test year 2005 settlement, with any remaining revenue requirement recovered through energy charges. (See CA-T-5, pages 44-45.) The DOD generally supported the rate design in Schedules PS, PP, and PT, (DOD T-3, pages 20-21) but suggested that HECO's proposed discount for Schedule PP customers directly served from distribution substations should be $3.38 per kW rather than the $1.75 per kW proposed by HECO (DOD T-3, pages 21-24 and DOD-309).

For settlement purposes, the Parties agree to the following concepts for overall rate design:

1) Customer charges will be set at the level proposed in settlement in the HECO 2005 test year case (see HECO's settlement transmittal letters of September

16, 2005 and September 22, 2005 in Docket No 04-0113);

2) Demand charges for Schedule J and Schedule H will be increased no more than 15% above the levels proposed in settlement in the HECO 2005 test year case. Demand charges for Schedule PS, Schedule PP, and Schedule PT will be increased no more than 25% above the levels proposed in settlement in the HECO 2005 test year case (see HECO's settlement transmittal letters of September 16, 2005 and September 22, 2005 in Docket No 04-0113);

3) Schedule PP will include a billing credit of $3.25 per billing kW for customers who are directly served from a dedicated substation. The amount of the credit is an agreed upon value to approximate the reduced level of costs that these customers impose on the HECO system. The Company's position is that neither the HECO cost of service study nor the cost of service study approach proposed by the Consumer Advocate accurately depicts the cost to serve Schedule PP customers who are directly served from a dedicated substation. As part of this settlement, the Company agrees in the next HECO rate case to include in the cost of service and propose in rate design a separate rate class for customers who are directly served from a dedicated substation. In this case, the Parties further agree that, to manage the billing impact on Schedule PP customers, the amount of the billing credit above $1.75 per billing kW ($1.50 per billing kW or approximately $2.5 million) will be recovered ratably based on billing kW from Schedule PS and Schedule PT customers;

4) Consideration of the power factor adjustment provision will be deferred to HECO's next rate case. HECO will provide updated estimates regarding completion of its power factor cost study and a plan to recommend appropriate cost-based power factor revisions in the rate design;

5) After revenues are assigned for proposed customer and demand charge levels, the recovery of the remaining class revenue requirement will be from energy charges;

6) HECO indicated in the press release that accompanied its filing of the application in this case that it would develop a proposal to assist low-income customers. The Parties agree for settlement purposes that the Company's proposed Schedule R should be modified to include a provision for customers in the LIHEAP program to be waived from the higher two tiers of the non-fuel energy charges, which is similar to the proposal before the Commission in the HELCO test year 2006 rate case. The impact of the LIHEAP waiver on revenues is expected to be relatively small and is not included in the calculation of revenues at proposed rate. Therefore, the LIHEAP waiver will have no impact in this rate case on the amount of the rate increase for other customers; and

7) For Schedule R, the percentage increase for customers with usages that fall into the lowest non-fuel energy kWh tier will be lower than the overall percentage revenue increase assigned to the Schedule R class. This rate design impact will not take effect until the non-fuel energy rate tiers are approved with a final decision and order in this case.

The settlement rate designs, including the optional time-of-use rates (Schedule TOU-R, Schedule TOU-C, and Schedule U), are attached in HECO T-20, Attachment 2 hereto.

29. Other Revisions to Rate Schedules and Rules

The Parties agree for settlement purposes to the following other revisions to rate schedules:

1) The clarification of the Apartment House Collection Arrangement in Schedule R;
2) No changes to Schedule E;
3) Modification of Schedule J to add a maximum qualifying load of less than 300 kW for new customers and to add a clause that allows existing customers with loads equal or greater than 300 kW to remain on Schedule J;
4) Modification of the Schedule J billing demand ratchet from the current 75% ratchet to the average demand ratchet (same as Schedule P);
5) Modification of Schedule J, Schedule PS, Schedule PP, and Schedule PT to include a five year term of contract provision and add a service termination charge, which is the same proposal advanced by the Company in the test year 2005 rate case;
6) Closing Schedule H to new customers. HECO will eliminate Schedule H in its rate design proposal in the next HECO rate case;
7) Modification of Schedule PS, Schedule PP, and Schedule PT to add a minimum qualifying load of 300 kW for new customers and to add a clause that allows existing customers with loads less than 300 kW to remain on Schedule PS, Schedule PP, and Schedule PT;
8) Elimination of the 150 kW minimum power service under the Schedule PS, Schedule PP, and Schedule PT minimum billing provision;
9) For Rider T, adding terms and conditions to allow customers to do emergency maintenance on their generating equipment without considering its impact on the customers' maximum on-peak demand in the determination of their billing demand;
10) For Rider M, changing the initial term of contract to five years;
11) Closing Rider I to new customers;
12) For Schedule Q, implementing the changes proposed by HECO;
13) Changing the Returned Checks Charge, Field Collection Charge, and Service Establishment Charge as described in the section on Other Revenues;
14) Eliminating the Rule No. 4, Section D, Standard Form Customer Retention Rates; and

15) Eliminating the electric vehicle charging rates, Rider EV-R and Rider EV-C.

HAWAIIAN ELECTRIC COMPANY, INC.
2007 TEST YEAR

NON-SALES ELECTRIC UTILITY CHARGES
($ in Thousands)

	At Present Rates	with interim surcharge At Present Rates	At Proposed Rates	At Stipulated Current Effective Rates
Non-Sales Electric Utility Charges				
Service Establishment Charges	$791.0	$791.0	$1,149.0	$ 791
Field Collection Charges	$88.9	$88.9	$332.2	$ 89
Returned Check(Payment) Charges	$38.5	$38.5	$112.9	$ 39
Late Payment Charges - OCARS	$5.0	$5.0	$5.0	$ 5
Late Payment Charges	$1,281.2	$1,330.5	N/A	$ 1,336 *
Total Other Operating Revenues	**$2,204.6**	**$2,253.9**	N/A	$ 2,260
				+$ 1,124 **
				$ 3,384

N/A (Not Available) - Updated estimate dependent on revised proposed revenues resulting from the Company's total Test Year updates.

* Electric Sales Revenues ($1,406,573)
× .095%

** June 2007 update, HECO T-13, p. 24 (see next page)

EXHIBIT 1
SUPPLEMENTAL INFORMATION
HECO T-3
DOCKET NO. 2006-0386
ATTACHMENT 1
PAGE 2 OF 2

JUNE 2007 UPDATE
DOCKET NO. 2006-0386
PAGE 24 OF 24

HECO-1312
DOCKET NO. 2006-0386
PAGE 1 OF 1
REVISED 6/8/07

Hawaiian Electric Company, Inc.
Miscellaneous Other Operating Revenues - REVISED
Test Year 2007 ($ in Thousands)

			Test Year 2007
Property Sold:			
Queen Emma	Dkt 02-0098, D&O 19839	$ 280	
Iolani Court Plaza	Dkt 98-0170, D&O 16833	138	
Kuliouou	Dkt 98-0314, D&O 16935	40	
Waianae	Dkt 98-0314, D&O 16935	22	
JUNE 2007 UPDATE Aiea Park Place - Note (1)&(3)	Dkt 2006-0323, D&O pending	11	
Palolo	Dkt 05-0280, D&O 22664	9	
Total Amortization of Deferred Gains - REVISED			$ 500
Property Licenses and Leases:			
JUNE 2007 UPDATE King Street building - HEI Note (4)		$ 216	
Company-owned land - Various		196	
Ward Avenue warehouse - Hawaii Fuel Cell		32	
Total Property Licenses and Leases - REVISED			444
Parking Revenue			261
Telecom Rent			214
Payment Protection Insurance			128
Other - Note (2)			77
Total Miscellaneous Other Operating Revenues			$ 1,624

1,124

Note: Totals may not add due to rounding.

Note (1): Sale is currently pending approval by the Commission in Docket No. 2006-0323. Assumes Commission approval is obtained and amortization commencing in May 2007.

Note (2): Includes amortization of Iolani Court lease premiums of approximately $4,000. Refer to Ms. Patsy Nanbu's testimony at HECO T-10 for discussion on the amortization of Iolani Court lease premiums.

JUNE 2007 UPDATE:
Note (3): The amount was slightly decreased by approximately $7,000 due to the change in amortization commencement due to a 3 month delay in closing of the sale for this property.

Note (4): As discussed in B. Tamashiro's response to CA-IR-299, HEI personnel will relocate from the 4th floor King Street building to another location. As such, the monthly rental revenues have decreased accordingly, by approximately $64,000. See Attachment 2, page 2 for revised calculation.

Public Affairs

HECO proposed to include $660,000 in Account 921 (Administrative and General Expenses – Nonlabor) for Public Affairs consultant, specific service and community process activities (under Activity 700 – Develop and Administer Business Plans; Expense Element 501 – Outside Services-General). This includes the utilization of consultants who provide specific expertise and an outside viewpoint on utility matters and specific projects (e.g., new generating unit, wind farms, ocean energy) that impact Hawaii's communities, as well as costs to work with and support the activities of the communities impacted by utility projects. These kinds of support of and cooperative working relationships with communities are consistent with the work that the Company has engaged in on major projects such as the new generating station at Campbell Industrial Park ("CIP"). The Commission in Re Hawaiian Electric Company, Inc., Docket No. 05-0146, Decision and Order No. 23514 (June 27, 2007), approved Hawaiian Electric's RO Water Pipeline Project and Environmental Monitoring Program, which were part of HECO's proposed Community Benefits Package. As stated in footnote 2 of the Commission's Decision and Order, "HECO, in an attempt to work cooperatively with the communities in West Oahu and minimize the risks of extended litigation over the CIP Generating Station Project, initiated a discussion process with local community members in West Oahu, the outcome of which is the Community Benefits Package that forms the basis for this docket." Id. at 3. The Commission "commend[ed] HECO for its innovative, cooperative approach in engaging the local communities in West Oahu and attempting to amicably resolve their concerns related to the CIP Generating Station Project" finding that the projects "are reasonable, sound results of a collaborative process that appear likely to benefit not only the local communities but all ratepayers on the island of Oahu." Id.

Both the Consumer Advocate and the DOD recommended an adjustment of $330,000 or one-half of the Company's test year estimate in this area. Although the Company's community efforts covered by the $660,000 benefit ratepayers by proactively minimizing dispute, litigation and delay of needed utility projects, the Company proposes to lower its test year estimate by an adjustment of $90,000 (resulting in inclusion of $570,000 as the test year estimate).

The Company intends to spend at least the originally estimated $660,000 in 2007, and will spend an estimated $240,000 in 2007 for two critical projects that have recently come to the Company's attention, and were not included in determining the original estimate of $660,000. The first is to fund $200,000 for development of greenhouse gas emission research. Act 234 (2007 Regular Legislative Session), which the Governor of Hawaii signed into law on June 30, 2007, established a greenhouse gas emissions reduction task force to prepare a work plan and regulatory scheme to achieve statewide greenhouse gas emissions limits. The Hawaii Natural Energy Institute ("HNEI"), the University of Hawaii Economic Research Organization ("UHERO"), and the University of Hawaii Research Corporation will soon begin research on the issue of greenhouse gases, which will be shared with the task force. Hawaiian Electric has agreed to assist in funding this research on greenhouse gas issues so that work can be started immediately on this issue. HECO T-10 Attachment 1A includes a description, provided by the UH Research Corporation, of the initial phase of the greenhouse gas policy analysis effort.

The second project is related to potential legal action against the HECO utilities by the federal government. The United States Fish and Wildlife Service has called on the United States Department of Justice (Criminal Section) to initiate an investigation and potential prosecution of HECO, MECO, HELCO and other utilities for the death of shearwater birds that hit utility lines while in flight. In discussions with HECO, the federal government has made clear that the utilities can avoid prosecution by implementing proactive mitigation measures to protect the shearwater birds. As a result, in 2007, HECO plans to fund $25,000 for the Oahu Offshore Island Seabird Management Program and expend an estimated $15,000 for an expert consultant in habitat conservation to work with the U.S. Fish and Wildlife Service to develop further mitigation plans for protection of these birds. HECO T-10 Attachment 1B provides a description of the Oahu Offshore Islands Seabird Management Program submitted by the Hawaii Chapter of the Wildlife Society.

With rapid changes in the industry and the community and legislative environments, it is not unusual for these types of needs to arise suddenly. It is critical for Public Affairs to have a sufficient budget to enable it to take timely appropriate action to protect ratepayer interests, support State Energy Policy and work cooperatively with Hawaii's communities on utility matters.

Although the Company intends to spend at least $660,000 in 2007 in this area, HECO proposes that the estimated $240,000 for the two critical items above be added to the Consumer Advocate's and the DOD's recommended $330,000, thereby resulting in a downward adjustment of $90,000 to the Company's original test year estimate (and a total of $570,000 in the test year).

Preliminary Phase of Greenhouse Gas Emissions Policy Analysis for Hawaii

The initial phase of the greenhouse gas policy analysis mandated by the Legislature will entail developing a research design for (1) the compilation of a greenhouse gas emissions inventory, (2) development of physical or economic linkages between activities and their greenhouse gas emissions, (3) analysis of policy options for reducing greenhouse gas emissions, and (4) building upon existing economic models (e.g., UHERO's and Charles River Associates' macroeconomic models) to assess the economic and social impacts of these policy options. This research design will provide the state Legislature with a clear roadmap of how to proceed in developing greenhouse gas reduction policies. . This initial effort will involve a series of workshops to review

- Greenhouse gas inventory analyses conducted by the Department of Business, Economic Development and Tourism and similar to related source/sink evaluations on-going in Western States partnerships;
- UHERO general equilibrium models of Hawai'i's economy. Using a 1997 base year, the models simulate greenhouse gas emissions associated with consumption of 5 fossil fuels in 131 industrial sectors. Dynamic simulations can calibrate projected economic activity and emissions by back-casting to 1990 and forecasting through 2020;
- Emissions analysis included in the integrated transportation/electricity models developed by General Electric Research Center under contract to Hawaii Natural Energy Institute for Hawaii County now being adapted for analysis of the other counties;
- Charles River Associates greenhouse gas emissions modeling and policy analysis done for California's greenhouse gas policy (Assembly Bill 32); and
- Emissions inventory and analytical frameworks used by other states and regions.

The reviews will identify what emissions data exist or can be derived from existing data and what emissions data need to be generated, including data on greenhouse gas emission generation from waste disposal and agriculture. The reviews will also evaluate data on carbon sequestration and data needs to account for future local carbon sequestration through agriculture and sylviculture. To the extent possible, a framework will be proposed for computing or estimating greenhouse gas emissions from all significant sources based on economic indicators or physical processes.

The initial phase will begin in mid-July and result in a status briefing to the Task Force in September. After receiving guidance from the Task Force, work on integrating the various modeling efforts will be undertaken with the intent of having an integrated analytical methodology ready for presentation to the next legislative session in December. In addition to the analytical methodology, work will begin on identifying the major elements in a greenhouse gas emissions inventory framework that is consistent with other work being undertaken in other states and regions. All subsequent work will be under the direction of Greenhouse Gas Emission Reduction Task Force called for in HB226 SD2 HD2 CD1 enacted by the 2007 Legislature.

Oahu Offshore Islands Seabird Management

Need:

Oahu's seabird nesting areas provide refuge for over 20 species of seabirds and migratory shorebirds. Threats to seabirds include predation by introduced animals, encroachment on nesting habitat by non-native plants, marine debris and other entanglement hazards, and human activities that endanger nesting birds. Management and education is needed to protect native seabirds and develop public appreciation and support.

Goals:

- Protect seabirds from introduced predators;
- Restore native vegetation by controlling weeds and planting native plants;
- Obtain information on seabird distribution and abundance;
- Determine the presence and/or extent of human disturbances on seabirds, and develop an effective program to educate the public about native Hawaiian seabird issues;
- Assess other threats to seabirds and marine life (such as marine debris and marine entanglement hazards) and mitigate as needed.

Objectives:

- Assess predation on seabirds using standardized methods. Control predators such as rats and predatory ants as needed. Continue research and deployment of an effective bait for the Yellow crazy ant (*Anoplolepis gracilipes*) on Mokuauia, Mokolii and Manana Islands.
- Control weeds using manual, mechanical and chemical methods on Oahu offshore islands including Mokuauia, Mokolii, Kapapa, Popoia, the Mokulua Islands, Manana and Kaohikaipu.
- Perform seabird nesting surveys on the above named islands.
- Monitor islands for human use and educate the public about seabird issues. Develop an educational brochure and signs designed to improve the public's understanding of, and appreciation for, native Hawaiian seabirds.
- Patrol offshore islands and coastal areas for marine debris and other entanglement hazards, such as discarded fishing nets. Map, document and remove entanglement hazards.
- Develop a volunteer program focused on seabirds and near-shore marine protection issues to help with all aspects of the seabird management program.

Location:

Offshore island seabird sanctuaries and nesting areas including Kaohikaipu, Manana, the Mokulua Islands, Popoia, Mokolea, Moku Manu, Kapapa, Mokolii and Mokuauia Islands. Education, survey and volunteer programs may be developed for urban forest areas of Honolulu to raise awareness and improve protection and management for White terns.

Budget:	
Project Biologist	$20,000
Operating supplies (native plants, etc)	$ 2,500
Educational materials, volunteer support	$ 2,500
Total	**$ 25,000**

Funding Period: July 1, 2007 – December 31, 2007

Partners:
The Wildlife Society – Hawaii Chapter; Hawaiian Electric Company, Inc.; Department of Land and Natural Resources; US Fish and Wildlife Service.

Submitted by:
David G. Smith, The Wildlife Society – Hawaii Chapter • 1421 Aalapapa Drive • Kailua • HI • 96734
(808) 973-9786 office • (808) 225-5614 cell • kawika.smith@earthlink.net

EXPIRING SOFTWARE AMORTIZATION

MINCOM $1.1 Million Buy-Down Fee Amortization (see HECO-1304, page 9, column [e])

Monthly Amount	$17,187	
Amortization Period (Jan - Sept.)	9	
	$154,683	
HECO Share (see HECO-1304, page 9)	70%	
Total adjustment per CA-101, Schedule C-15	$108,278	
Allocation to:		**%ages**
Production	$5,730	0.052923
Transmission	$3,498	0.03231
Distribution	$10,651	0.098369
A&G	$88,398	0.8164
Total	$108,278	1.000002

Note: Percentages based on HECO-1304, page 10

EPRI | ELECTRIC POWER RESEARCH INSTITUTE

Supplemental Project Agreement

1. **Project Title; Agreement, Funder and Project Numbers:** This Supplemental Project Agreement applies to the Project entitled: ***"Biofuels Crop Research in Hawaii".*** The Parties will reference Supplemental Project Agreement number **CF 012202-11156 (Project ID No. 066276)** in all correspondence. The terms and conditions of the Master Agreement between the Parties dated January 3, 2007 are incorporated herein and govern all Work hereunder. Any Purchase Order issued by Member pursuant to this Agreement is solely for Member's internal accounting requirements and, as such, the terms and conditions of such Purchase Order are superseded by the terms and conditions set forth in this Agreement.

2. **Contact Information:**

Contact	Name	Phone/Fax	Email
EPRI Project Manager:	David O'Connor	650-855-8970	doconnor@epri.com
EPRI Contracts:	Josephine M. Erickson	650-855-2003 / 1032	jerickson@epri.com
EPRI Sector Account Executive:	Richard Menar	650-855-2898	rmenar@epri.com
Member Contracts	Arthur Seki	808-543-7987 / 808-203-1581	arthur.seki@heco.com
Member Project Manager:	Darren Ishimura	808-543-7814	darren.ishimura@heco.com

3. ***Project Funding in U.S. Dollars:***

Funding Year	-2007-	-2008-	-2009-	-2010-	TOTAL
Funder Cofunding	$103,000				$103,000
Total U.S. Dollars	$103,000				$103,000

4. **Project Objectives, Tasks and Deliverables:** See Attached Exhibit 1, incorporated herein by reference.

5. **Invoicing:** Funder will be invoiced for $50,000 in 2007, the balance of $53,000 will be paid from Funder's Deposit Account.

☐ Current year payment enclosed (This form is the invoice for the current year).

☑ Address invoices to: Val Takata (KS3-9S)
Hawaiian Electric Company, Inc.
P.O. Box 2750
Honolulu, HI 96840-0001
Delivery: 820 Ward Ave.
Honolulu, HI 96814

Phone/Fax: 808-543-7656 / 7657
E-mail: val.takata@heco.com

IN WITNESS WHEREOF, the parties hereto have caused this Supplemental Project Agreement to be executed by their duly authorized representatives.

Approval / HAWAIIAN ELECTRIC COMPANY, INC.	Approval / ELECTRIC POWER RESEARCH INSTITUTE, INC.
820 Ward Ave (M/S WA4-NR) Honolulu, HI 96840-0001 Phone/Fax: 808-543-7987 / 808-203-1581	Post Office Box 10412 3420 Hillview Avenue Palo Alto, Ca 94303 Phone/Fax: 650-855-2003 / 1032
DM AS Signature: Karl Stahlkopf Name: Karl Stahlkopf Title: Sr. VP, Energy Solutions & Chief Tech. Officer Date: 9/7/07	Signature: Josephine M. Erickson Name: Josephine M. Erickson, Title: Revenue Contract Negotiator Date: September 10, 2007

Exhibit 1

To

Supplemental Project Agreement

CF 012202-11156 (Project ID No. 066276)

"Biofuels Crop Research in Hawaii"

A. Background and Objectives

The use of liquid biofuels (e.g., ethanol and biodiesel) in electric power generating units represents a potential option to increase HECO Utilities' renewable energy portfolio. ("HECO Utilities" herein refers to HECO and its subsidiary utilities HELCO and MECO.) In addition, utilizing biofuels for electric power generation will help HECO meet its Renewable Portfolio Standard (RPS) and reduce its consumption of fossil fuels. HECO Utilities currently have ongoing initiatives to evaluate the use of biofuels for electric power generation.

The use of biofuels in Hawaii to reduce its dependence on imported fossil fuels is a strategy that is also being considered by many public and private stakeholders in a variety of initiatives. However, there remains an information gap on biofuel crop strategies and implementation for Hawaii. Questions remain on agronomic requirements, climatic and hydrologic needs, fertilization requirements, pest profiles, invasive characteristics, milling requirements and oil return from milling, and waste stream characteristics in the unique volcanic environment of Hawaii. The work under this contract will benefit the public by beginning to fill these information gaps with the new learnings from the project.

A partnership dedicated to investigate the aforementioned issues can make the difference on which crops to establish in Hawaii to enable energy independence. It may very well be that no single crop plant as a fuel source will satisfy all environments available for biofuel exploitation within the state. In this case, knowledge of different plant productivity in different climates/niches will be useful. Maximizing the profitability of any crop requires matching the crop to the agro-environmental conditions and optimizing production practices. This in turn could help establish a local supply of biofuels for HECO Utilities.

The objective of this project is to gain a better understanding of plant productivity of various oil crops in different climates/niches in Hawaii such that key stakeholders have critical information relevant to evaluating the most promising oil crop options for local biodiesel production.

B. Tasks

Towards meeting the above objective, three research tasks are planned:

Task 1 – Develop and install test plots of *Moringa oleifera* ("malanguy") at two sites on the island of Molokai to determine its potential for biodiesel production in Hawaii and continue its oil processing analysis work

Task 2 – Initiate testing at multiple sites on the Big Island of Hawaii for evaluating performance of *Jatropha curcas* and *kukui* trees and subsequent data collection to begin developing growth models for Hawaii

Task 3 – Import hybrid oil palm seed materials, begin shadehouse grow-outs of this material, and initiate plots at multiple locations on the Big Island of Hawaii to test adaptability to various Hawaii microclimates to later develop Proof of Concept economic models.

C. Deliverables
The deliverable targeted for this project is a final report that includes progress and findings of all project tasks. The non-proprietary results of this work will be incorporated into EPRI R&D program 84, Renewable Energy, and made available to funding members of that program and to the public, for purchase or otherwise.

D. Estimated Period of Performance/Estimated Schedule
The project is scheduled to start in September 2007 and continue through November 2008. Subtasks are planned that will require further funding over multiple years; however this contract will be amended later to account for that future work.

HAWAIIAN ELECTRIC COMPANY, INC.

DATE 09/27/07 HECO
CHECK NO. 72791 002746

The attached Check is in Payment of the following invoice(s):

Date	Invoice/Credit Memo	Type	Description	Gross	Discount	Net
09/14/07	EP00324058		V09291	50000.00		50000.00
			TOTAL	50000.00	0.00	50000.00

REMOVE DOCUMENT ALONG THIS PERFORATION

HAWAIIAN ELECTRIC COMPANY, INC.

Bank of Hawaii
Honolulu, Hawaii
59-102/1213

CHECK NO. 72791

PAY FIFTY THOUSAND DOLLARS AND ZERO CENTS

TO THE ORDER OF

DATE 09/27/07

CHECK AMOUNT ********50,000.00

ELECTRIC POWER RESEARCH
INSTITUTE - EPRI DEPT 1527
P.O. BOX 61000
SAN FRANCISCO CA 94161

Jatez H Ramb

⑈072791⑈ ⑆121301028⑆ 0081⑈032688⑈

SEE REVERSE SIDE FOR OPENING INSTRUCTIONS

Hawaiian Electric Company, Inc.
PO BOX 2750 HONOLULU, HI 96840-0001
KS3-AD

ELECTRIC POWER RESEARCH
INSTITUTE - EPRI DEPT 1527
P.O. BOX 61000
SAN FRANCISCO CA 94161

72791

PO V 09291 2746

EPRI

INVOICE

Invoice:	EP00324058
Invoice Date	September 14, 2007
Page:	1 of 1

Please Remit To:
EPRI-DEPT #1527
PO Box 61000
San Francisco CA 94161
United States

Customer No:	11156
Payment Terms:	Net 30
Due Date:	October 14, 2007
Customer Ref:	

Customer: Hawaiian Electric Co., Inc.
Jim B. Beavers M/S WAG-HA
900 Richards St
Honolulu HI 96813-2956
United States

AMOUNT DUE: 50,000.00 USD

For billing questions, please call: 650-855-2669 Original

Line	Description	Quantity	UOM	Net Amount
1	66276-CF Biofuels Crop Research in Hawaii	1.00	EA	103,000.00
2	Deposit Account for General Use	1.00	EA	(53,000.00)
			Subtotal:	50,000.00
			AMOUNT DUE:	**50,000.00** USD

APPROVED FOR PAYMENT
$50,000.00

Please wire funds to:
Bank of America, New York, NY
ABA# 026009593
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EXPEDITE

Without DPAD and Franchise Tax Adjustment

Hawaiian Electric Company, Inc.
Revised Adjusted Interim at Curr Eff Rates w/Int Sync
Results of Operations

($ Thousands)

	Current Effective Rates	Additional Amount	Revenue Requirements to Produce 8.62% Return on Average Rate Base
Electric Sales Revenue	1,398,765	77,362	1,476,127
Other Operating Revenue	3,807	104	3,911
Gain on Sale of Land	500		500
TOTAL OPERATING REVENUES	1,403,072	77,466	1,480,538
Fuel	543,874		543,874
Purchased Power	387,492		387,492
Production	67,597		67,597
Transmission	10,272		10,272
Distribution	24,663		24,663
Customer Accounts	11,720		11,720
Allowance for Uncoll. Accounts	970	0	970
Customer Service	5,890		5,890
Administration & General	69,189		69,189
Gen Excise Tax Rate Incr Adj	328		328
Operation and Maintenance	1,121,995	0	1,121,995
Depreciation & Amortization	78,763		78,763
Amortization of State ITC	(1,304)		(1,304)
Taxes Other Than Income	130,731	6,875	137,606
Interest on Customer Deposits	377		377
Income Taxes	15,787	27,467	43,254
TOTAL OPERATING EXPENSES	1,346,349	34,342	1,380,691
OPERATING INCOME	56,723	43,124	99,847
AVERAGE RATE BASE	1,159,087	(772)	1,158,315
RATE OF RETURN ON AVERAGE RATE BASE	4.89%		8.62%

Without DPAD and Franchise Tax Adjustment

Hawaiian Electric Company, Inc.

Revised Adjusted Interim at Curr Eff Rates w/Int Sync
COMPOSITE EMBEDDED COST OF CAPITAL
Estimated Average

	A	B	C	D
	Capitalization			
	Amount in Thousands	Percent of Total	Earnings Reqmts	Weighted Earnings Reqmts (B) x (C)
Short-Term Debt	38,971	3.08	5.00%	0.154%
Long-Term Debt	480,727	38.01	6.09%	2.314%
Hybrid Securities	27,556	2.18	7.47%	0.163%
Preferred Stock	20,586	1.63	5.51%	0.090%
Common Equity	696,826	55.10	10.70%	5.896%
Total	1,264,666	100.00		

Estimated Composite Cost of Capital	8.617%
or	8.62%

Without DPAD and Franchise Tax Adjustment
Hawaiian Electric Company, Inc.

Revised Adjusted Interim at Curr Eff Rates w/Int Sync
AVERAGE RATE BASE
($ Thousands)

	Beginning Balance	End of Year Balance	Average Balance
Investments in Assets Serving Customers			
Net Cost of Plant in Service	1,331,363	1,370,649	1,351,006
Property Held for Future Use	517	3,567	2,042
Fuel Inventory	53,084	53,084	53,084
Materials & Supplies Inventories	12,838	12,838	12,838
Unamort. Net SFAS 109 Reg. Asset	53,483	55,970	54,727
Pension Asset	0	0	0
OPEB Amount	0	0	0
Unamort Sys Dev Costs	0	4,642	2,321
Unamort DSG Reg Asset	0	0	0
ARO Reg Asset	27	26	27
Total Investments in Assets	1,451,312	1,500,776	1,476,045
Funds From Non-Investors			
Unamortized CIAC	164,092	176,802	170,447
Customer Advances	1,001	756	879
Customer Deposits	6,369	6,827	6,598
Accumulated Def. Income Taxes	135,254	130,294	132,774
Unamort State ITC (Gross)	28,523	30,044	29,284
Unamortized Gain on Sale	1,582	1,214	1,398
Total Deductions	336,821	345,937	341,380
Difference			1,134,665
Working Cash at Current Effective Rates			24,422
Rate Base at Current Effective Rates			1,159,087
Change in Rate Base - Working Cash			(772)
Rate Base at Proposed Rates			1,158,315

Without DPAD and Franchise Tax Adjustment
Hawaiian Electric Company, Inc.

Revised Adjusted Interim at Curr Eff Rates w/Int Sync
WORKING CASH ITEMS

($ Thousands)

	A COLLECTION LAG (DAYS)	B PAYMENT LAG (DAYS)	C NET COLLECTION LAG (DAYS) (A - B)	D ANNUAL AMOUNT
ITEMS REQUIRING WORKING CASH				
Fuel Oil Purchases	37	17	20	537,767
O&M Labor	37	11	26	88,209
O&M Nonlabor	37	34	3	100,922
Pension Asset Amortization	37	0	37	-
ITEMS THAT PROVIDE WORKING CASH				
Revenue Taxes	37	66	(29)	124,437
Income Taxes-Present Rates	37	40	(3)	17,922
Income Taxes-Proposed Rates	37	40	(3)	45,389
Purchased Power	37	39	(2)	387,492

	E AVERAGE DAILY AMOUNT (D/365)	F WORKING CASH (PRESENT RATES) (C X E)	G AVERAGE DAILY AMOUNT (PROPOSED)	H WORKING CASH (PROPOSED RATES) (C X G)
ITEMS REQUIRING WORKING CASH				
Fuel Oil Purchases	1,473	29,467	1,473	29,467
O&M Labor	242	6,283	242	6,283
O&M Nonlabor	276	829	276	829
Pension Asset Amortization	0	0	0	0
ITEMS THAT PROVIDE WORKING CASH				
Purchased Power	1,062	(2,123)	1,062	(2,123)
Revenue Taxes	341	(9,887)	360	(10,433)
Income Taxes-Present Rates	49	(147)		
Income Taxes-Proposed Rates	124	-	124	(373)
Total		24,422		23,650
Change in Working Cash				(772)

Without DPAD and Franchise Tax Adjustment

Hawaiian Electric Company, Inc.

Revised Adjusted Interim at Curr Eff Rates w/Int Sync
COMPUTATION OF INCOME TAX EXPENSE

($ Thousands)

	Current Effective Rates	Adjustment	At Proposed Rates
Operating Revenues	1,403,072	77,466	1,480,538
Operating Expenses:			
Fuel Oil and Purchased Power	931,366		931,366
Other Operation & Maintenance Expense	190,629	0	190,629
Depreciation	78,763		78,763
Amortization of State ITC	(1,304)		(1,304)
Taxes Other than Income	130,731	6,875	137,606
Interest on Customer Deposits	377		377
Total Operating Expenses	1,330,562	6,875	1,337,437
Operating Income Before Income Taxes	72,510	70,591	143,101
Tax Adjustments:			
Interest Expense	(30,475)		(30,475)
Meals and Entertainment	81		81
	(30,394)	0	(30,394)
Taxable Income at Ordinary Rates	42,116	70,591	112,707
Income Tax Exp at Ordinary Rates	16,387	27,467	43,854
Tax Benefit of Domestic Production Activities Deduction	577		577
Tax Effect of Deductible Preferred Stock Dividends	23		23
TOTAL INCOME TAX EXPENSE	15,787	27,467	43,254

Without DPAD and Franchise Tax Adjustment

Hawaiian Electric Company, Inc.

Revised Adjusted Interim at Curr Eff Rates w/Int Sync
COMPUTATION OF TAXES OTHER THAN INCOME TAX

($ Thousands)

	Rate	At Curr Eff Rates	Adjustment	At Proposed Rates
Electric Sales Revenue		1,398,765	77,362	1,476,127
Other Operating Revenue		3,807	104	3,911
Operating Revenues		1,402,572	77,466	1,480,038
Public Service Tax	5.885%	82,484	4,559	87,043
PUC Fees	0.500%	7,008	387	7,395
Franchise Tax	2.500%	34,945	1,929	36,874
Payroll Tax		6,294		6,294
TOTAL TAXES OTHER THAN INCOME TAX		130,731	6,875	137,606

Without DPAD and Franchise Tax Adjustment

Hawaiian Electric Company, Inc.

Revised Adjusted Interim at Curr Eff Rates w/Int Sync
CALCULATIONS OF REVENUE REQUIREMENTS

($ Thousands)

OPERATING INCOME AT CURRENT EFFECTIVE RATES:		
Operating Revenues		1,403,072
Fuel and Purchased Power Expenses		931,366
Other O&M Expenses		190,629
Depreciation & Amortization Expense		78,763
Amortization of State ITC		(1,304)
Taxes Other than Income		130,731
Interest on Customer Deposits		377
Income Taxes		15,787
Total Operating Expenses		1,346,349
OPERATING INCOME AT CURRENT EFFECTIVE RATES		56,723
CALCULATIONS OF REVENUE REQUIREMENTS:		
OPERATING INCOME		
Rate Base at Proposed Rates		1,158,315
Proposed Rate of Return on Rate Base	x	8.62%
Operating Income		99,847
Less: Operating Income at Current Effective Rate		56,723
INCREASE IN OPERATING INCOME		43,124
OPERATING REVENUES:		
Increase in Operating Income		43,124
Operating Income Divisor	(divided by)	0.55664
INCREASE IN OPERATING REVENUES		77,466
Increase in Electric Sales Revenue		77,362
Other Operating Revenue Rate	x	0.134%
Increase in Other Operating Revenues		104
		77,466

Note: Increase in Operating Revenues amount reduced by $5 thousand.

Without DPAD and Franchise Tax Adjustment

Hawaiian Electric Company, Inc.

Revised Adjusted Interim at Curr Eff Rates w/Int Sync
CALCULATIONS OF REVENUE REQUIREMENTS

($ Thousands)

BAD DEBT:		
Increase in Electric Revenues		77,362
Bad Debt Rate	x	0.0000
INCREASE IN BAD DEBT EXPENSE		0
REVENUE TAX:		
Increase in Operating Revenues		77,466
Less: Increase in Bad Debt Expense		0
		77,466
PSC Tax & PUC Fees Rate	x	6.385%
		4,946
Increase in Electric Revenues		77,362
Less: Increase in Bad Debt Expense		0
		77,362
Franchise Tax Rate	x	2.500%
		1,929
INCREASE IN REVENUE TAX		6,875
INCOME TAX:		
Increase in Operating Revenues		77,466
Effective Income Tax Rate after considering revenue tax & bad debt	x	35.454%
INCREASE IN INCOME TAX		27,467
INCREASE IN OPERATING INCOME (check)		43,124

Note: Franchise tax amount reduced by $5 thousand and Increase in Income tax amount increased by $2 thousand.

Without DPAD and Franchise Tax Adjustment

Hawaiian Electric Company, Inc.

Revised Adjusted Interim at Curr Eff Rates w/Int Sync
CALCULATIONS OF REVENUE REQUIREMENTS

($ Thousands)

CHANGE IN RATE BASE:

	A EXPENSE AMOUNT	B AVERAGE DAILY AMOUNT (A/365)	C NET COLLECTION LAG (DAYS)	D WORKING CASH REQMT (B)x(C)
Increase in Revenue Tax	6,875	19	(29)	(546)
Income Tax at present rates	17,922	49	(3)	147
Income Tax at proposed rate	45,389	124	(3)	(373)
CHANGE IN RATE BASE - WORKING CASH				(772)
Rate Base at Present Rates				1,159,087
PROPOSED RATE BASE				1,158,315
Operating Income at Present Rates				56,723
Increase in Operating Income				43,124
OPERATING INCOME AT PROPOSED RATES				99,847
PROPOSED RATE OF RETURN ON RATE BASE (check)				8.62%

Without DPAD and Franchise Tax Adjustment

Hawaiian Electric Company, Inc.

Revised Adjusted Interim at Curr Eff Rates w/Int Sync
SUPPORT WORKSHEET

OPERATING REVENUES:	
Electric Sales Revenues	1,398,765
Other Operating Revenues	3,807
Gain on Sale of Land	500
TOTAL OPERATING REVENUES	1,403,072
FUEL OIL AND PURCHASE POWER EXPENSES:	
Fuel Oil Expense	537,767
Fuel Related Non-labor Exp	5,207
Fuel Handling Labor Expense	900
Fuel Oil Expense	543,874
Purchased Power Expense	387,492
TOTAL FUEL OIL AND PURCHASE POWER EXPENSES	931,366
OTHER OPERATION & MAINTENANCE EXPENSES:	
Production	67,597
Transmission	10,272
Distribution	24,663
Customer Account	11,720
Allowance for Uncollectible Accounts	970
Customer Service	5,890
Administration & General	69,189
Gen Excise Tax Rate Incr Adj	328
TOTAL OTHER OPERATION & MAINTENANCE EXPENSES	190,629

Without DPAD and Franchise Tax Adjustment

Hawaiian Electric Company, Inc.

Revised Adjusted Interim at Curr Eff Rates w/Int Sync
SUPPORT WORKSHEET

TOTAL FUEL OIL & PP AND OTH O&M EXPENSES (LABOR/NONLABOR)		
Fuel Oil Expense		537,767
Purchase Power Expense		387,492
Total Labor Expense		
Labor Expense		88,209
Total Labor Expense		88,209
Total Nonlabor Expense		
Nonlabor Expense		103,320
Fuel Related Expense		5,207
Payroll Taxes		6,294
Bad Debt Expense		(970)
Pension Expense		(12,929)
Pension Asset Amortization		0
		100,922
TOTAL FUEL OIL & PP, OTH O&M AND PR TAX EXPENSES		1,114,390
REVENUE TAX		
Public Service Tax		
Electric Sales Revenues		1,398,765
Other Operating Revenues		3,807
Less: Bad Debt Expense		(970)
Operating Revenues subject to PSC Tax		1,401,602
Public Service Tax Rate	x	5.885%
Total PSC Tax		82,484
PUC Fees		
Electric Sales Revenues		1,398,765
Other Operating Revenues		3,807
Less: Bad Debt Expense		(970)
Operating Revenues subject to PSC Tax		1,401,602
PUC Tax Rate	x	0.500%
Total PUC Tax		7,008

Without DPAD and Franchise Tax Adjustment

Hawaiian Electric Company, Inc.

Revised Adjusted Interim at Curr Eff Rates w/Int Sync
SUPPORT WORKSHEET

Franchise Tax		
Electric Sales Revenues		1,398,765
Less: Bad Debt Expense		(970)
		1,397,795
Franchise Tax Rate	x	2.500%
Total Franchise Tax		34,945
TOTAL REVENUE TAX		124,437
INTEREST EXPENSE:		
Weighted Cost of Debt		
Short-Term Debt		0.154%
Long-Term Debt		2.314%
Hybrid Securities		0.163%
Total		2.631%
Rate Base at Proposed Rates	x	1,158,315
TOTAL INTEREST EXPENSE		30,475
INCOME TAX EXPENSE SUMMARY		
Current		17,922
Deferred		(4,960)
State ITC		2,825
Pension Asset Amortization		0
TOTAL INCOME TAX EXPENSE		15,787
CALCULATIONS OF REVENUE TAX RATE:		
Franchise Tax Rate adjusted for Change in Oth Oper Revenues and Bad Debt		0.02497
PSC Tax Rate adjusted for Bad Debt		0.05885
PUC Tax Rate adjusted for Bad Debt		0.00500
REVENUE TAX RATE		0.08882
CALCULATIONS OF COMPOSITE INCOME TAX RATE:		
State Tax Rate		0.06015
Federal Tax Rate		0.35000
State Tax Rate		0.06015
Federal Tax Rate	x	0.35000
Federal Tax Effect on State Tax		(0.02105)
COMPOSITE INCOME TAX RATE		0.38910

Hawaiian Electric Company, Inc.

Revised Adjusted Interim at Curr Eff Rates w/Int Sync
SUPPORT WORKSHEET

CALCULATIONS OF COMPOSITE CAPITAL GAINS TAX RATE:		
State Capital Gains Tax Rate		0.03759
Federal Tax Rate		0.35000
State Capital Gains Tax Rate		0.03759
Federal Tax Rate	x	0.35000
Federal Tax Effect on State Capital Gains Tax Rate		(0.01316)
COMPOSITE CAPITAL GAINS TAX RATE		0.37444
CALCULATIONS OF EFFECTIVE INCOME TAX RATE:		
PSC Tax & PUC Fees Rates adjusted for Bad Debt		0.06385
Franchise Tax adjusted for Change in Oth Oper Rev and Bad Debt		0.02497
Bad Debt Rate adjusted for Change in Oth Oper Rev		-
Revenue Tax and Bad Debt rate		0.08882
Rev Tax & Bad Debt Reciprocal (1 - 0.08882)		0.91118
Composite Income Tax Rate	x	0.38910
EFFECTIVE INCOME TAX RATE AFTER CONSIDERING REVENUE TAX & BAD DEBT		0.35454
CALCULATIONS OF OPERATING INCOME DIVISOR:		
PSC Tax & PUC Fees Rates		0.06385
Franchise Tax adjusted for Change in Oth Oper Rev		0.02497
Bad Debt Rate adjusted for Change in Oth Oper Rev		-
Effective Income Tax Rate after considering revenue tax & bad debt		0.35454
		0.44336
OPERATING INCOME DIVISOR (1 - 0.44336)		0.55664

CERTIFICATE OF SERVICE

I hereby certify that I have this date served copies of the foregoing **JOINT PROPOSED FINDINGS OF FACT AND CONCLUSIONS OF LAW, EXHIBITS 1 and 2,** together with this Certificate of Service, by hand delivery and/or by mailing a copy by United States mail, postage prepaid, to the following:

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DATED: Honolulu, Hawaii, December 30, 2008.

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